5-1965

A Comparative Study of Economic Development: Thailand and India

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A COMPARATIVE STUDY OF ECONOMIC DEVELOPMENT: THAILAND AND INDIA

by

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A thesis submitted in partial fulfillment
of the requirements for the degree

of

MASTER OF SCIENCE

in

Economics

UTAH STATE UNIVERSITY
Logan, Utah

1965

ACKNOWLEDGEMENT

I wish to express appreciation to Dr. Leonard J. Arrington, my major advisor and committee chairman, for his valuable help and the sincere interest that he has shown in this study. Deep appreciation is also extended to committee members, Dr. Reed R. Durtschi and Professor Philip S. Spoerry for helpful advice and assistance.

I am greatly indebted to the Royal Thai Army which so generously gave me leave and assistance to make this study possible.

My deepest gratitude goes to my unselfish and understanding wife, Pana, and young daughter who remained at home. Their support and encouragement helped me much during my absence.

Special thanks are due to all of my friends who have come to study and lived together in Logan, for their helpful advice and encouragement. I also wish to acknowledge the friendliness, interest, and kind hospitality of the people of Logan, and especially to Mr. and Mrs. Matthias P. Monson, whose home provided congenial and pleasant surroundings while I completed this work.

Charnchai Charnchayasuk

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THE ECONOMIC DEVELOPMENT OF UNDERDEVELOPED COUNTRIES

Introduction

Quickening the rate of economic growth and the conquest of poverty are the primary expressed objects of public policy in the underdeveloped countries of the world. In the new countries, particularly in Africa and Asia which have recently become independent, it was necessary to start almost from scratch in the construction of an advanced economy. Such countries have usually had (a) a high proportion of population in agriculture, with low productivity; (b) little capital per person and crude technology; (c) major expenditures for food; (d) high birth and death rates; (e) poor health and sanitation; and (f) a low level of education. These and other characteristics not only indicate the situation they are in politically, economically, and socially, but also what needs to be done to improve their status.

Most of the countries in Southeast Asia are underdeveloped and desire economic growth in order to prosper in the modern world. This is particularly true of Thailand and India. Although both depend on the monsoon, they have adopted different types of economic organization to attain economic growth. Thailand has adopted a democratic mixed economy, while India has adopted a mild socialist economy.

The objectives of this study are to compare the economic systems in Thailand and India, to assess the effectiveness of the economic programs they have outlined, and to compare their achievements and accomplishments in economic growth and development. As a Thai, I am naturally personally interested in techniques which might be useful in promoting the economic development of Thailand.

What is an Underdeveloped Country?

It is obvious that the countries of the world are not equally well off. That some are rich and some are poor causes people to concern themselves about the differences. The status quo, with its wide economic disparities among countries, is being challenged. Poor countries are trying to narrow the range of disparities. Their leaders realize that to develop their countries without external help is slow and painful. Thus, the world is divided into two blocs—the Free and the Communist worlds. The Cold War is not a political struggle alone, but also a contest between two widely different types of economic organization.

While it is recognized that the world consists of poor countries alongside the rich, it is difficult to distinguish between the two.

> The labels underdeveloped and developed are substituted for poor and rich, and each of these is then defined solely in terms of economic performance. An underdeveloped country can be defined as one that, on the average, affords its inhabitants an end product of consumption and material well being inferior to that being provided in developed countries. Conversely, a developed country becomes one that affords an

> economic and product superior to that of underdeveloped countries.[1]

Less developed countries and low-income countries are not exactly identical, although the categories overlap to a great extent. Sparsely settled countries, like Australia and Canada at the turn of the twentieth century, or the United States in 1850, may have been underdeveloped but not poor. An example of a country rich but underdeveloped is Kuwait, with its enormous oil royalties and its high average income per capita, but with the vast majority of its population making no contribution to the high national revenue.

In attaching the labels underdeveloped and developed to particular countries, or in interpreting the meaning of these labels when applied to particular countries, one should bear two factors in mind. First, "the term underdeveloped implies relative status."[2] The term takes on meaning as comparisons are made among countries. An underdeveloped country is one that is economically poor compared with other countries; that is, with other countries regarded as developed. Second,

> . . . the term underdeveloped is arbitrary in usage; there is no absolute rule as to the precise dividing line between underdeveloped and developed. One rule of the thumb is to regard as underdeveloped any country whose per-capita income is no greater one-fourth that of the highest income country.[3]

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[1]Walter Krause, Economic Development (Belmont, California: Wadworth Publishing Company, Inc., 1962), p. 6.

[2]Ibid.

[3]Ibid.

Basic Characteristics

To understand the underdeveloped world, several features are sufficiently widespread and distinctive to warrant their being looked upon as earmarks of underdevelopedness.

Low income. It is simple to assert that any person or country receiving low income should be considered poor. Underdeveloped countries thus suffer from a low level of economic and technical achievement. Some underdeveloped countries, including China and India, have cultures and civilizations which go back more than 2,000 years. The general picture is that "the two thirds of the world's people who lived in underdeveloped countries receive but one-third of the total world income being generated while the one-third living in developed countries receives two-thirds of the world's income."[1]

Examination of income estimates for the major regions of the world reveals that in 1955 per capita GNP ranged from $2,300 down to $55, with the world norm placed at $390. Incomes in regions comprised entirely or very largely of underdeveloped countries ranged from $275 down to $55: Latin America, $275; the Near East, $200; Africa, $110; the Far East and South Asia, $100; and Communist China, $55.[2]

Illustrative of the wide spread in incomes among regions, the richest region shown had an income roughly six times the world average, while the

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[1] For supporting data, see UN, National Income and Its Distribution in Under-Developed Countries (New York, 1951), Table 2, p. 3.

[2] Ibid., p. 9.

income of the poorest region was roughly one-seventh of the world average.

Low well-being. Low well-being is also one of the characteristics of underdeveloped countries, and is found in various non-monetary measures of material well-being. Of the various non-monetary measures available, the following most frequently capture attention: amounts and types of food intake, infant mortality rates, life expectancies, literacy rates, and extensiveness of public facilities. "Some underdeveloped countries like India and China (mainland) have overpopulated. Every third person in the world is either Chinese or Indian."[1] This means that at least one-third of the world's population lives barely above the level of subsistence. There is food-shortage; there are not enough schools for children; life is miserable. Because of the climate, life expectancies are low, thus reducing the production of the countries. With high birth rates, incomes of the family are divided into small fractions. "In India, China, Indonesia and the rest of Asia, as well as most of the Arab world, the comparable figure of life expectancy was probably more often below 40 than above."[2]

Average life expectancy is the net result of a wide variety of causes—diet, disease, infant and maternal health, exposure to hazards, availability of medical care, sanitation practices, etc. As such, it supplies on over-all measure of what a particular society affords as end-product to the people who

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[1]Hawaharal Nehru, Chinese and India Planning (Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1959), p. 185.

[2]Norman S. Buchanan and Howard S. Ellis, Approaches to Economic Development (New York: The Twentieth Century Fund, 1955), p. 40.

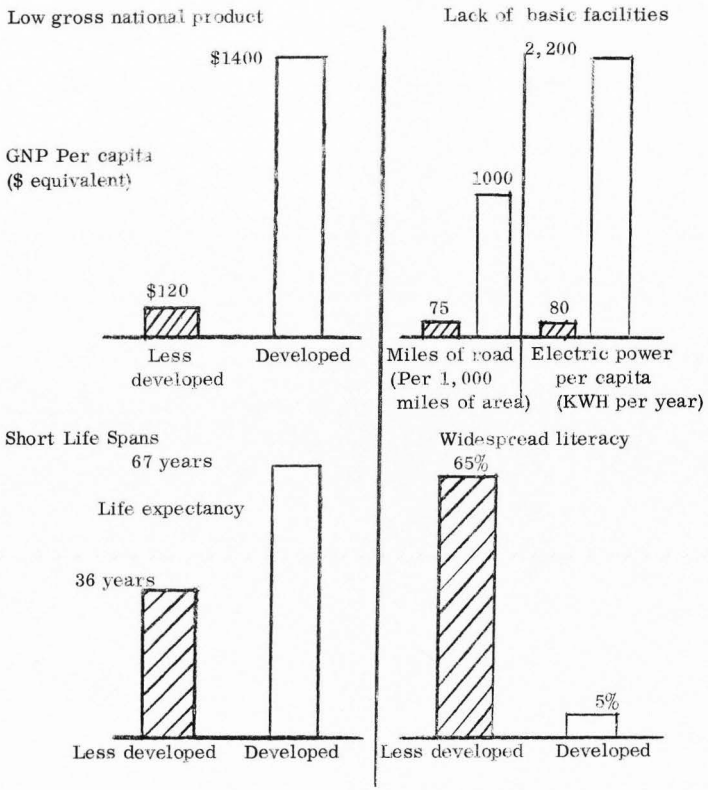

Chart I. BASIC PROBLEMS OF LESS DEVELOPED AREAS

Source: Walter Krause, Economic Development (Belmont, California: Wadworth Publishing Company, Inc., 1962), 13.

compose it. There can be little question that improved life expectancy is indicative of improved well-being, especially if the improvement is appreciable.

Poverty in accumulated capital. Real income per person may be low primarily because the productive resources available--though efficiently used--are so poor in quality or so deficient in quantity that little, if any, greater output can be had from them. For example, since labor is a basic resource, people who are illiterate, diseased, and undernourished are necessarily poor workers who will have a low output per person. Productive capital resources are those used primarily to further the output of final consumption goods and services. They include factory buildings, machinery and equipment, transport facilities, water, sewerage and irrigation works, communication facilities, public buildings, laboratories, schools, work animals, livestock inventories of raw-materials, and goods-in-process. Apart from these productive capital goods which yield a direct flow of consumption goods and services, consumption capital goods include dwellings, churches, shrines, museums, and consumer's durable goods. It is difficult for underdeveloped countries to acquire such accumulated capital since people's incomes are low.

Backwardness in technique. Because of the lack of education people are unable to develop new kinds of production. In agriculture, they still use methods of farming which have been used for many generations. There are not enough technical schools, and a large supply of labor is untrained and has no skill. While the population increases, production is still low.

Types of Underdeveloped Countries

Underdeveloped countries are those whose economic and social progress is dependent upon the continued employment of foreign high-level manpower in a wide variety of core positions in major public and private institutions. The state of development of their indigenous human resources is insufficient to permit these countries to move forward on their own.[1]

Typically, the underdeveloped country is an agrarian society. The vast majority of its population is rural or nomadic. Most of the rural population is engaged in subsistence activities, contributing only marginally to the market economy. They are typically raw-material producers of primary goods producers. Output and employment tend to be heavily concentrated in agricultural or mineral fields, while manufacturing tends to account for very little, either in terms of output or employment. In developed countries, in contrast, emphasis is typically on manufacturing, while raw materials production plays a relatively lesser role. Those engaged in the production of cash crops such as tea, coffee, cotton, fruits, or vegetables are a minority. The so-called modern sector of the economy consists of the central government and its regional and local branches—few large plantations, trading establishments in the cities and the larger villages—and some industries such as cigarette manufacturing, bottling of beverages, food processing, or an occasional textile mill.

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[1]Frederick Harbison and Charles A. Myers, Education, Manpower and Economic Growth (New York-London, McGraw-Hill Book Company, 1964), p. 49.

> In the low-income underdeveloped countries, the percentage of the total output classes as having originated in raw-materials production invariably exceeds that regarded as having manufacturing origins, with ranges of 40%-60% and 10%-15% respectively, being fairly depictive of the situation. In the low-income underdeveloped countries, upwards of 50% of the labor force is typically engaged in raw-materials production, and in some countries, the figure exceeds 80%.[1]

In political development, underdeveloped countries fall into two broad categories: the first and smallest group consists of countries which have been independent for a long time and are presently ruled by rather well-entrenched dynastic elites. These include Saudi Arabia, Thailand, Ethiopia, Liberia, and Afganistan.

The second category is composed of countries which have only recently emerged from colonial rule or are in the process of transition to independent status. These include most of the African countries and some Asian countries, such as India and Burma, which until recently were governed by France, Belgium, Italy, and the United Kingdom.

In neither the newly-emerging nor the long independent countries is there as yet wide participation of the masses in political life. This results from a number of factors, including poor communications, widespread illiteracy, lack of education, and the traditional subsistence sector, coupled with apathy toward the aspirations of the ruling elites.

Underdeveloped areas are characterized by relatively abundant labor and relatively scarce land and capital equipment. This means that per capita

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[1] Charles P. Kindleberger, Economic Development (New York: McGraw-Hill Book Company, 1965), p. 15.

output is low and will remain low as long as this proportion persists. Moreover, the worse the disproportion becomes, the lower will be per capita incomes. Economic necessity will force the substitution of labor for land or capital equipment wherever possible in the struggle to raise total output.

More important is underemployment. The manner in which underemployment is generated in underdeveloped countries can be readily illustrated. In the apparent absence of better alternatives, persons in underdeveloped countries are likely to find themselves involved in one or another of the following situations. The farm plot of the family may already have enough, or more than enough workers on it to handle the required tasks, but when the younger members of the family reach working age (i.e., become includable in the labor force) they may, since other avenues of employment are lacking or believed lacking, simply join others in the family in whatever they are doing—whether or not the presence of an additional person adds anything to total production. In a technical sense no employment shows up, but underemployment is induced (i.e., labor's relationship to complementary factors of production is worsened) with the result that per-worker productivity is low. Or, persons may enter "make-work" types of service activities (i.e., as servants) that typically entail low productivity and low personal income. Thus, what might under some circumstances result in outright unemployment evolves instead as disguised unemployment, and is found regularly in underdeveloped countries.

General Methods of Attempting Economic Development

Most nations today are development-minded. The less developed countries which have been poor and stagnant for centuries are in a state of revolt against poverty, disease, ignorance, and dominance by stronger nations, and they are no longer disposed to entrust their future exclusively to the forces of the market, the whim of nature, or the judgment of colonial rulers.

> The advanced countries likewise are committed to growth, and the more rapid and spectacular the better. This almost universal quest for forward movement is in essence a revolution which has no precedent in history. It is fired by rising aspirators for economic, social, and political progress, and it is based upon the optimistic conviction that man, in his century of science, can move forward by leaps instead of steps.[1]

The great awakening in the underdeveloped world is a reaction to various forces and factors. The particular forces and factors, or combinations thereof, responsible for having triggered it unquestionably differ somewhat among underdeveloped countries.

First, income must rise cumulatively (i.e., year after year) for some considerable period. A once-and-for-all increase in income is not enough.

Second, the increase in income must bestow income benefits upon the population as a whole, covering various occupational and income groups.

> It is essential to recall that per capita income can rise either because added income accrues to a few persons within a highly inequitable income structure or because the same added income accrues to many people within a more equitable income structure. In the concept of economic development, a rise in real per capita

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[1]Harbison and Myers, op. cit., p. 1.

income comes about as the result of more than just a few receiving higher income.[1]

Third, real income must rise accumulatively over time. Indeed, instances may exist in which economic development can still be regarded as occurring even though real per capita income does not rise. For example, an increase in population can serve to rule out a per capita increase in income, notwithstanding a substantial addition to the aggregate level of income. The popular hope is that aggregate income will rise faster than population, so that per capita income can also rise.

These three categories are the guideposts of every government. High income means better living. However, each underdeveloped country must approach its problems in its own way.

CHAPTER II

THAILAND AND INDIA AS UNDERDEVELOPED COUNTRIES

Thailand and India, from every economic point of view, are regarded as underdeveloped countries. Thailand's income per capita is about $100, while India is about $72.

Nevertheless, from a geographical point of view, there are many differences between these two countries. India is a vast country, is overpopulated, and is politically influential among underdeveloped areas. Thailand is a small country and relatively underpopulated.

A comparison of the economies of Tahiland and India at the time the two countries embark upon their economic development programs reveals many basic likenesses. They share the pressure of increasing population, and agriculture accounts for a high percentage of the national output. Unlike Thailand, India's agricultural production is insufficient to meet domestic needs. Although intensive methods of cultivation are used, India feels the need for such scientific improvement as seed selection, improved fertilizers, and improved farming methods. Nevertheless, Thailand and India have the same economic goals, that is, to eliminate poverty and to raise standards of living.

Noneconomic Background of Thailand

Geographical aspects. Thailand, whose population in the 1962 census showed 28.7 million, is located in the middle of the mainland of Southeast Asia,

with Burma on the West and North, Laos on the upper East, and Cambodia on the lower East. On the extreme South it is bounded by Malaysia. Thailand extends an area of about 200,000 square miles, from north to south, about 1,000 miles—between approximately 6 to 20 degrees north latitude. The greatest extent of east-west is about 480 miles.

Historical aspects. The meaning of "Thai," the name of the race occupying the country, means "freedom." The love of freedom of Thai people is shown clearly in Thai history. The Thai used to live in the southern part of mainland China, but in 1253 were forced to migrate southward because of the Chinese invasion under the leadership of Kublai Khan. As a consequence, they founded the country in the present location in 1257.

Most of Thai history is a story alternating between peace and wars against neighboring countries, especially Burma, until the period of colonialism when all of these neighboring countries lost their independence to the Western Powers. Thailand was lucky; she was used by the French and the British as a buffer state. Thailand started westernizing under King Chulalongkorn, who ruled the country from 1868 to 1910.

Absolute monarchy was the form of government until June 24, 1932, when constitutional monarchy was introduced through a bloodless coup d'etat.

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[1]Likhit Hoontrakul, The Historical Records of the Siamese-Chinese Relations (Bangkok: Thai Bithawa Press, 1953), pp. 97-101.

Natural Resources

Climate and topography. Over most of Thailand, a warm wet southwest monsoon lasts from May to November, and is followed by the relatively cool and dry northwest monsoon. February to May is the hot, dry season. In the southern peninsular region it is rainiest during the dry season of the rest of the country.

The country can be subdivided into four regions. Central Thailand, which is drained by the important Chao Phya River, is the geographic and economic heart of the country. In the mountainous forested northern region, agriculture is largely limited to the fertile valleys of the Chao Phya tributaries. Farming is difficult in the flat rolling terrain of the northeastern region and farm at little more than a subsistence level. The small elongated southern region has several sizable coastal plains as well as a mountain chain running northwest which at times borders on the sea.

Agricultural land.[1] Agricultural land is 15 percent of the land area—about average for the Far East. Per capita agricultural land of about 0.9 acres is also about average for the area. The climate and topography favor rice growing, which accounts for the three-fourths of the cultivated land. Average size of farm is 10 acres, though farms in the north are less than half the average of the country. The highest average net farm income, in order of rank,

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[1]This section is condensed from Thai-American Economic and Technical Cooperation (Bangkok: United States Operations Mission Thailand, January 1961).

are the Southern, Central, North and Northeast regions. Average net farm income in the Northeast is usually only one-quarter that of the Southern region. More than 80 percent of the farmers own their land.

Principal crops. Rice is by far the largest crop, and Thailand is one of the world's largest rice exporters. Rubber, a major crop, is growing in importance. Both rice and rubber produce about 60 percent of the total export income. Cotton, peanuts, fruits, sugar cane, coconuts, tobacco, castor beans, corn, and various fibers (kapok, kenaf, etc.) are also grown.

Forests. Approximately 63 percent of the land is forested, but much of this is scrub timber. Teak is the most important forest product. In the North, lac output is valuable. A large percentage of this product is consumed domestically by residential construction, furniture making, and shipbuilding. Much wood goes into charcoal for home consumption. Resins and oils are also extracted from forest trees.

Fisheries. Both salt and fresh water fishing are important in Thailand, as fish is an essential part of the diet. Fisheries are the second largest industry in extent and value. The rivers, canals, ponds, rice fields, and irrigation tanks are good breeding grounds.

Minerals. Tin reserves amount to about 16 percent of the Free World total. Tungsten reserves are also important. Relatively small deposits of gold, manganese, molybdenum, antimony, asbestos, lead, zinc, and copper are found. Limestone, gemstone, and marble are exploited on a small scale. Very large deposits of salt and gypsum are known, and several deposits of high-grade iron ore have been found.

Fuels. Wood, lignite, and rice husks are used as sources of energy. Household fuel is mainly charcoal. A large lignite deposit is being worked in the North, and small deposits occur elsewhere in the Kingdom.

Distribution of GNP. Agriculture contributes about 44 percent of the GNP; trade, finance, commerce and transportation, 17 percent; and government and other services, 14 percent.

Human Resources

About three-quarters of the people are of Thai stock. About 14 percent are of Chinese stock which are important in banking, commerce, and mining. Persons of Malayan descent amount to 3.5 percent, and there are large minorities of Cambodian, Laotian, and Vietnamese descent, with many Indians in the cities.[1] The annual rate of increase in population is estimated at 3.1 percent.

By and large, the Thai people are self-dependent and individualistic, nonaggressive and nonextremist, polite and respectful of seniority. There is no caste system, but a class structure based on political power, social connections, economic standing, education, and family background is common among the elite in Bangkok and other urban areas.[2]

Manpower. The main occupations of the majority of Tahi people are farming and government services. While the Thai people are interested in

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[1]Thai-American Economic and Technical Cooperation, p. GI-2.

[2]Richard J. Coughlin, Double Identities: The Chinese in Modern Thailand (Hong Kong: Hong Kong University Press, 1960), p. 137.

TABLE I

OCCUPATION OF POPULATION 11 YEARS OF AGE AND OVER

Occupation	Male	Female	Total
Professional, technical and related workers	114,941	59,019	173,960
Administrative, executive and managerial workers	23,643	2,548	26,191
Clerical workers	133,716	20,587	154,303
Sale workers	325,254	410,203	735,457
Farmers, fishermen, hunters, loggers and related workers	5,574,571	5,757,918	11,332,489
Miners, quarrymen	19,347	6,908	26,255
Workers in transport and communication occupation	138,145	6,465	144,610
Craftmen, production process workers and labourers	539,837	266,368	806,205
Service, sport and recreation workers	152,310	121,065	273,375
Workers not classified by occupation	84,848	14,411	99,259
Total economically active population	7,106,612	6,665,492	13,772,104
Noneconomically active	1,508,644	1,984,369	3,493,013
Unknown	26,520	19,357	45,877
Total	8,641,776	8,669,218	17,310,994

Source: Central Statistics Office, National Economic Development Board, Thailand Population Census, 1960 (Bangkok, 1962), 27-35.

government service and farming, other occupations are left mostly for the Chinese and other non-Thai. The latest report on the Population Census, conducted in April 1960, indicate that the labor force (population 11 years of age and over who were economically active or were looking for work) of Thailand consisted of half of the population. Of the total labor force, there were 13.7 million persons at work and 80,000 persons looking for work.[1]

However, as in almost all underdeveloped countries, a situation of underemployment exists—particularly in the agricultural area. During planting and harvesting seasons, the entire labor force in the village is occupied. After that is completed, they have nothing to do until next season.

Education. The current literacy rate is about 60 percent. Four years of school attendance was made compulsory in 1932; over 90 percent of the children of "compulsory school age" are in school. There are about 21,500 primary schools, 950 secondary, 200 technical, 35 teacher training and 8 special schools. Five universities have a total enrollment of more than 12,000 regular students. Students comprise about 16 percent of the population, with 3.5 million in primary and secondary schools.

Health. Life expectancy is about 48 years for males, 52 for females. The infant death rate is about 56 per 1,000 live births; the maternal death rate is about 5.5 per 1,000 live births.

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[1] Chinawoot Soonthornisima, A Macroeconomic Model for Economic Development of Thailand (Bangkok: Thamasart University Press, 1964), p. 15.

Noneconomic Background of India

Geographical aspects. India is well marked off from the rest of Asia by mountains and the sea. She is bounded by the Himalayas in the North, and in former times these vast ranges, with their majestic peaks more than four miles high and the vast hill systems beyond, were an impenetrable barrier protecting the Indian subcontinent from invasion. The country stretches southward and, at the Tropic of Cancer, tapers off into the Indian Ocean between the Bay of Bengal on the East and the Arabian Sea on the West. Lying entirely in the Northern Hemisphere, the mainland extends about 2,000 miles from north to south and about 1,850 miles from east to west, covering an area of 1,261,597 square miles. Measured by the extent of its territory, India is the seventh largest country in the world.

Historical aspects.[1] The known history of the subcontinent covers some 4,500 years. The first major civilization was located in the valley of the Indus River. The ancient Greeks called the region India, meaning "the land of the Indoi; that is, of the people living near the River Indus. It flourished between 2500 B. C. and 1500 B. C. and was centered about two great cities, Harrappa and Mohenjo Daro. The Harrappa culture was highly developed. Presumably the Harrappa people were the forerunners of the Dravidian peoples of the southern

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[1]This section is condensed from India: Some Facts (Washington, D. C.: Information Service of India, 1964); Encyclopedia International IX (New York: Grolier Inc., 1963), pp. 182-193; and R. C. Majunda Encyclopedia Americana XIV (New York: Americana Corporation, 1964), pp. 271-272.

India. During the fourth century, northern India was invaded by Alexander the Great. Though the invasion was of short duration, it created cultural ties between Indians and Greek divilization. A few years after Alexander retreated, King Chandra Gupta Maurya created the first Indian Empire from his base in Bihar. But it was Ashoka (Asoka), Chandra Gupta's grandson, who carried the Mauryan empire to its greatest territorial extent. Under Ashoka the Kingdom included Afganistan, Hindustan, and most of the Deccan penninsula. During his reign the empire witnessed stability and prosperity. Art and literature were at a high point, and there was intellectual and religious toleration.

The empire disintegrated shortly after Ashoka's death. Near the end of the fourth century A. D. a new empire arose in Bihar and spread its control over much of the area formerly under the Mauryas. This was the empire of the Guptas, whose greatest ruler was Chandra-Gupta II. But invasion from central Asia again upset northern India and brought a period of anarchy. The Gupta empire fell apart, leaving local Kingdoms such as that of Harsha around Delhi (7th Century) and the Palla Kingdom in Bengal (mid 8th to 12th centuries). In the 14th century, India was ruled by the Muslims from the Persian Gulf under Mohammed bin Tughluq, and Islam was introduced to India. In northern India the muslim invaders settled down, intermarried, and became Indianized. Persian arts, architecture, and Language were assimilated by and synthesized with the Hindu culture. Then in 1526 Babur led the first Mongol invasion of the Northern India, and began the creation of the Mogul Empire at Delhi. The Mogul empire lasted for 240 years. The anarchy following the decay of Mogul power

set the stage for the period of European domination. The year 1757 marked the beginning of the epoch of rapid expansion of British power in the subcontinent. Since then until 1947, India was under British rule.

Racial origins. Throughout its long history the subcontinent has been invaded, more or less peacefully, by a wide variety of peoples. A basic result has been that India exhibits a greater variety of ethnic grouping and racial stocks. A majority of the peoples of South Asia are of Caucasoid racial stock, though Indian Caucasians are normally of darker hue than European Caucasions.

Natural Resources[1]

Climate and topography. The season in India are characterized most importantly by the variations in rainfall. In summer, the winds of the southwest monsoon bring high temperatures and abundant moisture to most of India. The distribution is uneven, however. The rains are of real economic importance in the agricultural land. If the monsoon is favorable, bumper crops may result. If it is delayed, famine may threaten. Beginning in November, the rains stop, since the prevailing winds shift to the northeast. In the north, however, from November to February the weather is cool and dry. From March to May is the hot season in most of India. Dry weather continues, and in regions where the temperatures during December may have dropped to 40 degrees, day-time temperatures move to 110 degrees and higher.

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[1]This section is condensed from Monroe Berkowitz, India: Struggle Against Time (Chicago: Scott, Freeman, and Company, 1963).

Agriculture land. India has a land area of approximately 1.2 million square miles or 812 million acres—about two-fifths the size of the United States. But about one-third of its land is too high, too steep, or too rough to be used for agriculture. About one-fourth of it has soil too poor to yield enough to keep a farmer alive. This leaves a total crop area of about 350 million acres, or less than one acre per person.

The geography of a country is the very foundation on which is built up its economic structure. It has molded and shaped not only India's economic institutions, but also her social organization and the character and outlook of her people.

Dr. Vera Anstey has summed up the economic influence of climate in India thus:

> Due to the diversity of Indian climate, India possesses a great variety of animal, vegetable, and mineral products, ranging from the heavily-coated Kashmir hill sheep to the camel of Rajasthan and elephant and tiger of Bengali; from the wheat, fruit and fir trees of the north to the rice and cocoanuts of the hot lowlying swamps and coastal regions; and from the coal and iron fields of Bengal, Bihar and Orissa to the gold of Mysore.[1]

Principal crops. Rice is the leading crop of India. It is the staple food of most of the people and covers the largest area and produces the largest quantity. In 1960-1961 the total acreage under rice was 83.3 million, and total production was 33.7 million tons. However, India's production has been insufficient for her requirements—imports have had to be obtained. Wheat is the next

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[1]Kewel K. Dewitt and J. D. Varma, Indian Economics (Delhi: Premier Publishing Company, 1964), p. 1. Quoted directly from Vera Anstey.

important crop. In 1961 it covered 31.7 million acres and production was 18.8 million tons. Millets, maize, pluses, and barley are also grown in various parts of the country. India has the largest area under sugar cane in the world. However, the average yield of cane per acre is very low and the quality of the cane produced is inferior as compared with that in other important producing countries. Cotton is also a leading crop, but still not enough for internal use. Oil seeds, peanuts, tobacco, tea, coffee, rubber, and spices are also grown.

Although India has held many world records for the production of crops, there are hardly enough for internal use.

Forests. In area, forests cover about 2.7 million square miles; that is, about 22 percent of India's total geographical area. The major products consist of timber, firewood, and fodder. Timber is largely used for house building, the construction of railway carriages and bus-bodies, and for making furniture and agricultural implements. However, the annual per acre productivity of Indian forests is very low: 3 cubic feet, as compared with 56 cubic feet in France, 37 cubic feet in Japan, and 18 cubic feet in the U.S.A.[1]

Minerals. The full extent of India's mineral reserves, like that of many other underdeveloped nations, has not yet been surveyed. Coal is India's leading mineral in both value and quantity of output, constituting more than two-thirds of the total value of mineral production in the country. Its production has been rising steadily in recent years. In 1961 it was nearly 56 million metric tons. India's

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[1]Dewett and Varma, op. cit., p. 11.

iron ore reserves, estimated at 21,000 million tons, have been assessed at one-fourth of the total estimated reserves in the world and her deposits the largest of any country.[1] Other important minerals are manganese, titanium, mica, bauxite, gypsum, and chromite. There are, however, a number of important minerals in which the country is deficient. This deficiency is most seriously felt in the case of petroleum, sulfur, and the non-ferrous metals—copper, lead, zinc, and tin.

Sources of power. The principal sources of power available in India are coal, oil, and waterpower. Lately, hydroelectricity has been rapidly coming into greater use, so that very soon it may become the most important source.

Human Resources

According to the 1961 census the country's population is 439,072,893. As compared with 1951, it was greater by 80 million or 21.5 percent. The average density for the country as a whole is 370 per square mile. Of the total population in 1951 of 356 million, 104 were self-supporting, 38 were earning dependents, and 214 were non-earning dependents. Thus, more than 70 percent of the population consists of dependents (both non-earning and earning). According to the 1961 census, 69 percent of the total population derived their livelihood from agriculture, and industries accounted for only 11 percent, commerce for 4 percent, transport, etc., for 1.6 percent, and other services and miscellaneous

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[1] Ibid., p. 3.

occupations for 10 percent.[1]

The average expectation of life. The average expectation of life in India is perhaps the lowest among that of all the civilized country in the world. For 1951 it has been estimated at 32 years for both men and women. The expectation of life according to the 1961 census is estimated more than 45.

Education. In 1960-1961 there were 472,362 recognized institutions, and 47.81 million students on the rolls and 1.50 million teachers. This means that slightly more than 1 percent of the Indian people now receive an education.

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[1]Ibid., p. 15.

CHAPTER III

PLANNING FOR DEVELOPMENT IN THAILAND AND INDIA

Economic Development Plan of Thailand

Thailand's capacity for economic development. Generally speaking, the Tai economy can be regarded as a free enterprise economy, and this has been true for 700 years. However, growth without government promotion was slow. After World War II, the government, realizing that many problems could not be solved by the private sector or by the "free" market, began to play an increasingly important role in the economy. Part of this recognition came from the fact that some of the traditional elements of growth had lost their force:

> Most of the good rice land has been occupied, for some years average yields have remained static, and the trend of rice exports has leveled off after a prolonged period of increase. The most accessible teak forests have been cut and their regeneration will require decades. Uncontrolled cutting of timber by farmers and illicit forest operators threatens to cause serious crosion and endangering the Nation's future water resources. Adverse world market conditions of a more than temporary character have forced a sharp curtailment of tin production. Meanwhile, there is no relaxation of the pressures for continued economic expansion; the population is growing at the already high rate of over 2% a year, with prospects of a still higher rate in future.[1]

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[1] International Bank for Reconstruction and Development, A Public Development Program for Thailand (Baltimore: The John Hopkins Press, 1959), p. 3.

These circumstances were not cause for pessimism with respect to Thailand's long-run economic prospects. The country still had a potential for development in its natural resources and the energy of its people. But it was clear that effective government was needed to supplement the private economy.

As Thailand was an agricultural country, the initial effort would have to be made in agriculture.

> Agricultural experts have long held that it would be possible to more than double the food crops produced by the Asian farmers if only they could be induced to improve traditional methods of cultivational methods of cultivation, if they could be supplied with enough fertilizer and if land subject to drought conditions of irregular water supplies could be linked to adequate irrigation.[1]

However, it was accepted that Thailand could not achieve economic development by concentrating on agriculture alone. Industry must play an important and increasing role in the nation's economy. Further development of mineral resources was indicated. Cottage or home industries had a long history, with Thai silk, silverware, bronzeware, and lacquerware having a wide reputation at home and abroad.[2]

The chief problems facing Thailand in promoting industrial development were: (1) Deficiencies in transportation, power, and communication;

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[1]United Nations, Economic Survey of Asia and the Far East 1963 (Bangkok: United Nations Publication, 1964), p. 12.

[2]Chinawoot Soonthornsima, A Macro Economic Model for Economic Development of Thailand (Bangkok: Thamasart University Press, 1964), p. 27.

(2) insufficiency of domestic capital; and (3) the shortage of skilled technicians and managerial personnel essential to profitable operation.[1] Clearly, it was necessary for government to use its superior organizational and financial resources to solve these problems.

> Economic development is essentially a process of increasing the rate of self-sustaining economic growth. This requires the healthy growth of economic capacity which, in turn, necessitates the mobilization of capital and of natural and human resources in conjunction with sound economic and planning policies and execution.[2]

The National Economic Development Board. The Government of Thailand established the National Economic Development Board in July 1959 to recommend an integrated, economically sound development plan incorporating specific development objectives and targets, based upon appraisal of available resources and upon careful studies of development projects and performance. The Office of the National Economic Development Board was set up to carry out the necessary tasks under the supervision of the NEDB Executive Committee, the latter comprised of technically qualified persons appointed by the Council of Ministers.

The first economic development plan of Thailand covered a period of six years, with two phases of three years each—from 1961 to 1963 and from

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[1] Ibid., p. 37.

[2] The National Economic Development Plan, Prime Minister's Remarks (Bangkok: Office of the National Economic Development Board, 1964), p. a.

1964 to 1966. The major reason for the division was to be able to apply the experience gained during the first period in improving the planning for the second period.

Development objectives and policy. The primary objective of the National Plan of Thailand is to raise the standard of living of the people of Thailand by mobilizing and utilizing both human and natural resources to achieve a high rate of economic growth. The achievement of this objective requires that there should be an increase in the per capita output of goods and services, and that this increased output should be equitably distributed so that, to the extent possible, all citizens and not merely a privileged few derive benefit from it.

> The special characteristic is an emphasis on the well-being, both material and the spiritual, of the population. This indicates the fact that no attempt is made to achieve the "practical maximum rate of investment"— or to pay a high price for economic development.[1]

The main development policies may be summed up as follows:

1) Supplementing the private sector. The government intends to make direct investment only in the social overhead areas, such as irrigation, power and energy, communication and transportation, research, public utilities, public health, and education. The keynote of the public development program is, therefore, the encouragement of the economic growth in the private sector. The resources of the government will be mainly directed to projects, both in the agricultural and industrial sectors of the

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[1]Vichitvong Pombhejara, "Thailand's Six-Year Plan," Asian Survey (March, 1965), 163.

economy, which have this objective in view. From these projects, irrigation takes the lead. Four irrigation projects (Greater Chao Phya, Yanhee, Mae Klong, Kampaengpet) alone will add nearly a million tons of rice to Thailand's output.[1]

The development of irrigation during the last three years of the Plan will increase irrigated areas as shown below:[2]

	Irrigated areas	
	1963	1966
State irrigation	8,662,000	8,972,000
Private irrigation	1,383,750	1,912,050
Irrigation reservoirs	360,829	424,829
Total	10,406,759	11,308.879

Of great importance is the Yanhee multi-purpose project whose dam and reservoir will protect the Central Plain from floods and even out the water supply. It will provide also 560,000 kilowatts of badly needed electric power.

2) Emphasis on agriculture. As 80 percent of the working population are engaged in agriculture, the Plan places great emphasis on the improvement of agriculture activities. The development of agriculture in Thailand can be divided into the following four categories:[3]

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[1] D. Insor, Thailand: A Political, Social, and Economic Analysis (New York: Frederick A. Praeger, 1963), p. 151.

[2] The National Economic Development Plan (Second phase: 1964-1966), NEDB, Government of Thailand, January 1964, p. 64.

[3] The National Economic Development Plan, p. 47.

(a) The development of natural resources, such as land, forests, water resources, and wildlife. Government activities in this category include irrigation, forestry, fisheries, and land development.

(b) Research and experiment in new agricultural techniques in order to bring about reforms in production methods, increase productivity, improve the quality of yeilds, stimulate the production of new and improved crops, and extensive breeding of animals.

(c) Agricultural promotion and the diffusion of information are two principal means by which government can render effective service to the country's agricultural population. This is done directly through officials trained in agriculture and indirectly by means of demonstration of improved methods.

(d) The promotion of the farmer's income and welfare through producer cooperatives and other farmer organizations, low-interest agricultural credit, and land ownership. Other government development program and services, such as the construction of highways and feeder roads and of industries based on agricultural products, as well as expanded social services, will also bring benefits to the farmers.

In the field of agriculture, more emphasis is put on the development of animal husbandry, fishing, and forestry. Since there is no real need to increase the number of livestock, emphasis is placed on the improvement of livestock

quality and eradication of animal diseases. Production of fresh-water fish is not expected to increase significantly. More emphasis is put on marine fishing, which has always been an important occupation in Thailand. Further work will be done for the promotion of deep-sea fishing, and new fishing techniques will be introduced with conservation in mind.[1] The future for timber is not very promising owing to the past overexploitation. While exports of teak have declined, this may be offset to some extent by increases in output and export of other varieties of timber.[2]

3) Encouraging private investment in manufacturing industry. The government has put emphasis only on research, survey, and promotion in manufacturing. Both domestic and foreign private investments are encouraged and promoted by various means. The industrial and mining production targets originally set forth in the plan have, in general, been surpassed due to promotion schemes and growing domestic demand. The growth of industry in the private sector will be further stimulated by a variety of aids and incentives, including an ample supply of inexpensive power, loans on favorable terms, the establishment of industrial estates, tariff protection when justified tax relief, and a minimum of restrictions and controls. The performance for the key industrial products is presented in Table II.

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[1] Ibid., p. 70.

[2] Ibid., p. 54.

TABLE II

INDUSTRIAL AND MINING OUTPUT AND TARGETS, 1959-1963

Item	Unit	Production					
		1959	1960	1961	1962	Plan target 1963	1963
Gunny bags	(000 units)	5,060	6,878	8,842	10,816	7,500	14,000
Sugar	(000 M. T.)	80	120	155	151	87	125
Paper	(000 M. T.)	2,600	2,741	3,627	5,860	6,400	4,000
Cigarettes	(000 units)	8,439	8,875	9,789	10,500	12,000	12,000
Cement	(000 M. T.)	482	543	800	967	723	967
Cotton textiles	(million sq. yds.)	n.a.	n.a.	87	109	140	n.a.
Tin-in-concentrates	(M. T.)	9,840	16,757	18,386	20,323	14,000	21,606
Gypsum	(M. T.)	8,000	13,000	12,000	21,000	15,000	23,889
Lignite	(000 M. T.)	141	107	108	135	420	137

n.a.. = Not available

Source: National Economic Development Plan (Second Phase: 1964-1966), NEBDB, Government of Thailand, January 1964, p. 22.

4) Development of human resources. Manpower training and planning form an integral part of economic development. They also serve as links between the economic and education plans. Parallel to the six-year Economic Plan for Thailand, the Minister of Education, Mom Luang Pin Malakun, has proposed a six-year education program, with emphasis on primary and vocational education.[1] So far as educational development is concerned, manpower requirements during the period 1966-1980 will call for a greater output turn of secondary school graduates. While no serious strain on the university level of education is indicated, there will be a major reorientation of university curricula in order to meet Thailand's need for scientific, engineering, and professional talent.[2]

5) Maintaining monetary stability. Excessive spending on the part of the government will be avoided. The aim is to maintain the value of the baht and to keep price increases to a minimum.[3] Maintainance of financial stability is a cardinal point of Thailand's economic policy. Outlays on development must be closely related to the financial resources available to the government so as to avoid inflationary effects. It is considered that such a policy will not only be most conductive to steady and sustained economic development, but is a fundamental requisite for the welfare of

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[1] Insor, op. cit., p. 153.

[2] The National Economic Development Plan, p. 138.

[3] Pombhejara, op. cit., p. 165.

the country.[1] The strong position of the baht is confirmed by the fact that on October 20, 1963, the Thai government successfully established a par value at the IMF at the rate of Bht. 20.84 per U. S. dollar.

6) Promotion of free competition. The government promotes commercial competition in the private sector within proper limits. It is expected that free competition will have beneficial results on prices. At the same time, the government controls and regulates the commercial system to ensure such free competition, and to prevent the establishment of monopolies or other business combinations which exploit producers or consumers. Another important element of commercial policy is to encourage Thai nationals to participate more actively in trade and general commerce. The state also promotes market analysis, both domestic and foreign, and assists small Thai businessmen by establishing increasing credit facilities.

7) Planning regional development. Accepting the fact that regional balanced growth is politically, socially, and economically necessary, the government has paid special attention to planning geographical distribution in such a way as to develop a number of medium size towns. This will prevent excessive concentration in the Bangkok area and spread the fruits of economic development more widely throughout the nation.

8) Finance. From Table III, it can be seen how much the government has spent in developing all sectors.

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[1] NEDP, op. cit., p. 11.

TABLE III

TOTAL PUBLIC DEVELOPMENT SPENDING IN F. Y. 1961-1963 COMPARED WITH PROJECTED SPENDING IN F. Y. 1964-1966 (IN MILLION BAHT)

	F. Y. 1961-1963 estimated		F. Y. 1964-1965 projected	
Sector	Amount	%	Amount	%
Agriculture and cooperative	1,647	14.1	2,975	14.7
Industry and mining	965	8.3	1,196	5.9
Power	2,341	20.0	1,798	8.8
Transportation and communications	3,167	27.1	7,005	34.5
Education	685	5.9	1,806	8.9
Health	390	3.3	975	4.8
Community facilities and social welfare	1,723	14.8	3.745	18.4
Unallocated	761	6.5	800	3.9
Total	11,677	100.0	20,300	100.0

Source: Economic Development Plan (Second Phase, 1964-1966) NEDB, Government of Thailand, January 1964, p. 27.

Appraisal of the Plan. Economic Planning is of a kind which is alien to Thai experience. It came out at the suggestion of the report made by the IBRD Mission in 1958. In October 1958 the Revolutionary Party under Field Marshal Sarit Thanarat assumed governing responsibilities. The Plan itself was drafted in a short period of time without much preparation and careful study. It can be said that the Plan came out as a political inspiration. The development objectives and targets were based upon department's projects

and upon appraisal of available resources. However, the planning done by the National Economic Development Board is in itself most commendable, in view of Thailand's lack of experience in this field. But planning for economic progress is of a different kind altogether: it does not consist merely of collecting statistics, setting some targets, and hope that these would be met. Economic planning must be a unique experience for each country.

Paul Sithi-Amnuai quotes from the book, Economic Development, Objective, and Methods written by Paul Alpert that:[1]

> The nature and direction of planning of each country are thus determined by its political orientation. Planning in itself, however, is a neutral technique, which can serve whatever purpose is desired. It is up to the planners to translate into concrete policies the general objective formulated by the political decision-making authorities, and to make the latter fully aware of the implications of their decisions and to indicate possible alternative courses of action.

From an economic point of view, the Plan is not without deficiencies. Although the Plan covered both public and private sectors. It has always been criticized that some projects overlapped each other, and there was lack of coordination. Some projects of the Plan were set under the influence of top officials, so it is quite difficult to determine if some projects are worthwhile. The weak spot of the Plan is that it is aimed to the development of public utility, which usually is the work of government already. It failed to encourage the private sector to cooperate and take an effective part in the economic development of the country. This is due to the fact that the Plan came out

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[1] Paul Sithi-Amnuai, "A Problem of Planning," Far Eastern Economic Review, XLIV(1964), 302.

TABLE IV

PLANNED INCREASES IN AGRICULTURAL OUTPUT, 1961-1966

Item	Production		Index
	1961 Actual	1966 Target	(1961 = 100)
Crops (tons)			
1. Rice	8,247,000	9,500,000	115
2. Rubber	186,100	210,000	113
3. Maize	598,000	750,000	125
4. Tapioca	2,012,500	2,200,000	109
5. Ground nuts	107,900	167,000	155
6. Cotton	38,300	70,000	183
7. Tobacco leaves	48,400	55,000	114
8. Sugar cane	3,984,000	4,000,000	100
9. Coconut	1,041,000	1,600,000	154
Fisheries (tons)			
1. Fresh water fish	72,000	80,000	111
2. Marine fish	233,000	300,000	129
Livestock (head)			
1. Water buffaloes	5,400,000	5,670,000	105
2. Cattle	3,800,000	3,990,000	105
3. Ducks	6,600,000	7,000,000	106
4. Chickens	44,000,000	50,000,000	114
Forest products (Cu. M)[a]			
1. Teak	105,665	100,000	95
2. Yang	319,482	300,000	94
3. Other timbers	857,781	1,000,000	117
4. Firewood	1,317,325	1,350,000	102

Source: Economic Development Plan (Second Phase, 1964-1966), NEDB, Government of Thailand, January 1964, p. 56.

[a]Cu. M = Cubic Meter

so suddenly ; the private sector was not ready and could not respond immediately.

Perhaps the most serious problem relates to the rapid population growth (3 per cent per annum). While there are several hints that there is an urgent need to do something about it. The Thai Government has evidently not yet established a population policy. A development plan should be a plan of social reform: The state must emphasize what it wants its citizens to have in such things as education and social security. Paul Sihi-Amnuai wrote:

> Thailand's planning has no social objectives apart from a vague objective of raising "the standard of living of the people." This is certainly too vague on objective: every individual is attempting to raise his standard of living, irrespective of state intervention.

The Plan emphasized the heavy development of agriculture, with less emphasis on manufacture and industry. The history of economic development in advanced countries shows that if the economic development is on the right way, agriculture would gradually decrease its importance and the output in GNP would decline while the value of manufacturing industry gradually increase and would play important role in the economy. But in the Thai economy for the past 5-6 years it has not been happening that way. According to the statistics published in the Report of the Bank of Thailand for November 1964 (p. 68) agriculture output declined 39.5 percent in 1957 to 36.1 in 1962. During the same period, industrial output has moved up one percent, that is, from 11 to 12 percent. It can be seen that people in the private sector have not participated broadly enough in the Plan for development of the nonagricultural sector.

A second question concerns the development pattern. It is acceptable as a policy that industrialization should be gradual and should occur mainly in

the private sector. Nevertheless, one cannot help feeling that the Plan should attempt to lay down some kind of industrial development pattern which is suited to and consistent with the over-all development program. Such a pattern would serve as guidelines to both the private sector and the government itself. Precisely, it should concern the type of manufacturing industries which have potentialities to develop in Thailand in the future. As Thailand is still an agricultural country, this means she could produce cheap raw materials to feed the industrial sector in some branches, like cotton mills, rubber factories, paper mills, and canning factories. The government should give more encouragement to building these factories. With the raw materials produced in the country, this would tend to raise the output in agriculture, thus making agricultural output more stable with less dependence on foreign markets. It would also help farmers to spend more time in working. An industrial pattern would serve as a guidepost to manpower planning.

> It is rather obvious that the so-called "programming techniques" have not been used very much by Thai Planning authorities. Most technical efforts have been concentrated on "project analysis" which is undoubtedly a very important aspect of economic planning. But to be truly significant, economic planning requires both programming and project analysis. An economic development is essentially an over-all plan, not just a combination of various sectorial programs and projects as is still the case with the present Plan in Thailand.[1]

The last suggestion is that Thailand should not depend on rice any more. Eleizer B. Ayal[2] has criticized the IBRD Mission which recommended that the

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[1] Pombhejara, op. cit., p. 166.

[2] Eleizer B. Ayal, "Thailand's Economic Development," Pacific Affairs XXXIV (1961), 165.

future role of rice is of key importance. This most baffling part of the Report affirms the following: (1) Most of the land suitable for rice farming has been occupied already. Marginal lands are being cultivated, and this has resulted in the leveling off, if not a decline, in the average yield. (2) The export prices of rice show a long-run declining trend and the prospects for a rise are poor. (3) Any expansion of the area under rice will require not only a substantial public investment and a great deal of effort, but also considerable technical and administrative capacity. (4) The figure on gross national product and its composition by industrial origin indicate very low productivity of rice farming. The rice farmers, comprising over 70 percent of the labor force and using more than 70 percent of the total cultivated area, contributed during the years covered by the Mission's statistic a yearly average of only 16 percent of the total Gross National Product and only 40 percent of total agricultural production.

The vision of Thailand as a "rice economy" should be dropped. A new approach to Thailand's future development should be considered.

Economic Development Plan of India

Problems of development in India. India's economic problems begin with the size, increase, and diversity of population; backwardness and poverty; social customs and attitudes; the caste system; and the attitude toward animals. Barbara Ward wrote in India and the West[1] that in India it is not a sector of

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[1]Barbara Ward, India and the West(New York: W. W. Norton and Company, Inc., 1961), p. 152.

society but the whole of the society that is poor. Only half a million pay any income tax at all; and, unlike the West, the nation is already overpopulated. In the West population sparked economic growth. Coal and iron came before sanitation, steam engines before modern drugs. In Asia, on the contrary, improvements in health came first, and rapid growth in population long proceeded any broad industrial breakthrough. This combination of poverty and pressure of population complicates the processes of India's democratic planning at every turn.[1]

Economic development in India must be undertaken concurrently with the development of new political and social institutions. The immediate historical background in India is that of independence from colonial status gained by peaceful means. She started off her economic development with 360 million people, with little capital accumulation. And while they are naturally anxious to increase the standards of people, any additional population would add to India's problem, whether it is food or commodities. To provide the masses of the Indian people the opportunity to lead a good life, India needs planned development.

Planning for development. When independence came, India had a slender industrial base. Millions of her rural people suffered under the weight of a traditional agrarian structure. The partition of the country had uprooted millions of people and dislocated economic life. Productivity in agriculture

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[1]Meyer Weinberg, "A Comparison of India and China," in Issues in Social Science (New Jersey: Prentice-Hall, Inc., 1959), p. 196.

and industry stood at a low level. Although India held many records of world agricultural production, she still could not produce enough to feed her people.

Her resources for development were the land and its resources—agricultural land and products, mineral resources—and manpower. However, agricultural land and products combined with manpower, caused the very problems which development sought to overcome. These problems were excessive pressure of population on land, resulting in very small units of cultivation and a large mass of landless labor; defective tenures, especially the problem of tenants at will; inadequacy of irrigation facilities and soil-erosion; problems of agricultural finance-both long term and short term; problems of health, sanitation and education of the agricultural mass.[1]

In order to cure these problems, there are two types of interrelated programs:

a) Programs aimed at a direct improvement and utilization of agricultural resources, and through them at an increase in agricultural production.

b) Programs aimed at bringing the different rural economic and social classes into a more equitable relationship with one another, and a general improvement of the institutional framework under which agriculture was carried on.[2]

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[1]P. T. Bauer, Indian Economic Policy and Development (New York: Frederick A. Praeger, 1961), p. 9.

[2]G. R. Kamat, Recent Trends in Agriculture: India 1963 (London: Information Service of India, 1963), p. 121.

The latter programs related generally to land reforms, development of cooperatives, and development and regulation of marketing. They were meant to eliminate and minimize the influence of such exploitative elements as the zamindars and other intermediaries who had no productive function to perform in the agrarian economy, and regulation or substitution by other agencies of such other elements as landlords and money-lenders.

India's other highly promising road out of poverty lay in sharply stepping up the production of industries, large and small.[1] Because of its natural resources, India has very important advantages and considerable potential for industrial growth. Its known reserves of iron, manganese, and bauxite are extensive. There is considerable coal, mica, and atomic material such as thorium ores. Surveys and exploitations have already shown the possibility of oil reserves. India's famous rivers have a potential for hydroelectric power perhaps among the highest in the world.

Should India remain dependent upon foreign supplies for food and capital goods, the whole economy might be held back to the relatively low level of expansion that exports were likely to achieve.

> The chief reason for concentrating on creation of capital goods industry is quite simply that India has the best internal market and abundant industrial raw materials which would make such a policy sensible, even if exports looked more promising. Heavy industry is the greatest multiplier in any economy.[2]

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[1] Ibid., p. 9.

[2] Ward, op. cit., p. 154.

India's third line of action in its conquest of poverty was closely related to the other two. It was to lift up the level of productivity of the nation as a whole and gear it to the needs of the country. The main key here was education—not only general education but technical education to raise the levels of skills and technical know-how on the farms and the factories.[1]

Indian Planning Commission. The central agency for planning in India is the Planning Commission, set up a few weeks after the adoption of the constitution. This Commission, headed by the Prime Minister, has seven members, a staff of technical and economic experts, and various advisory groups. Its original job was to draft a plan that would be a blueprint for the next five years. It analyzed the economy's available resources—natural, human, and capital.

Indian planning can be said to have begun formally in 1952 when the Plan for 1951 to 1956 was finally published. The strategy of the planning process can be summed up as giving India the developed infrastructure, the "big push" in industry, and the modernization of agriculture without which no economy so far has achieved the momentum of sustained growth. Within this broad strategy, the scale and endowment of the Indian economy dictate a high degree of self-sufficiency in both heavy industry and food.[2]

First five-year plan. This first plan took over several projects which had been worked out earlier and integrated them into a well-knit scheme

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[1] Kamat, op. cit., p. 10.

[2] Ward, op. cit., p. 154.

of economic and social development embracing every part of the country. The First Five-Year Plan was launched in 1950-1951. It had a two-fold objective.[1]

> Firstly, it aimed at correcting the disequilibrium in the economy caused by the war and partition. Secondly, it proposed to initiate simultaneously a process of all-around balanced development which would ensure a rising national income and a steady improvement in living standards.

The plan at first tried to present a coordinated view of the requirements of the economy and the resources available. The topmost priority in the Plan was given to agriculture and community development projects (including irrigation and power). Through its emphasis on agriculture, irrigation and power, the Plan aimed at creating the base for more rapid economic and industrial advance in the future.

The distribution of outlay in the public sector as between different heads of development is shown in Table V.

The financing of the public sector outlay in the two plans is shown in Table VI.

In the First Plan relatively greater stress was placed on programs designed to build up the agricultural potentials of the country. Consequently, programs for agriculture and irrigation comprised 31 percent of the Plan outlay. In the First Plan, which was a modest first effort, India invested only about 7 percent of its national income in development.[2] From these financial resources

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[1] Dewit and Yarma, op. cit., p. 416.

[2] Planning Commission, Towards a Self-Reliance Economy (Government of India, 1962), p. 17.

TABLE V

DISTRIBUTION OF OUTLAY IN THE PUBLIC SECTOR BETWEEN DIFFERENT HEAD OF DEVELOPMENT

	Rs. crores[a]			
	First Plan		Second Plan	
Head	Expenditure	Percentage	Expenditure	Percentage
Agriculture and community development	291	15	530	11
Major and medium irrigation	310	16	420	9
Power	260	13	445	10
Village and small industries	43	2	175	4
Industry and minerals	74	4	900	20
Transport and communications	523	27	1300	28
Social services and miscellaneous	459	23	830	18
Total	1960	100	4600	100

[a]Crore signified 10,000,000 rupees

Source: Third Five Year Plan, Planning Commission, Government of India, 1961, p. 33.

TABLE VI

FINANCING OF THE PUBLIC SECTOR OUTLAY IN THE TWO PLANS

	First plan		Second plan	
	Actual	Percentage	Estimated	Percentage
Outlay on the plan	1960	100	4600	100
Internal resources	1772	90	3510	76
External assistance	188	10	1090	24

Source: Third Five Year Plan, Planning Commission, Government of India, 1961, p. 33.

90 percent came from internal resources, and only 10 percent came from external assistance.

The First Five Year Plan was instrumental in bringing about a marked improvement in levels of production, both in agriculture and industry. It also initiated a number of structural and institutional changes. The Plan evoked widespread public interest and enthusiasm, and there was anew insistent urge for rapid development all over the country.

Second Five-Year Plan. On April 1, 1956, the Scond Five-Year Plan was launched. It was more ambitious and bolder than the First Plan. It was formulated with reference to the following principal objectives:[1]

1) A sizable increase in national income so as to raise the level of living in the country.

2) Rapid industrialization with particular emphasis on the development of basic and heavy industries.

3) A large expansion of employment opportunities.

4) Reduction of inequalities in income and wealth and a more even distribution of economic power.

These objects were, of course, interrelated. A significant increase in national income and a marked improvement in living standards could not be secured without a substantial increase in production and investment. To this end, the building up of economic and social overheads, exploration and development of minerals, and the promotion of such basic industries as steel, machine, coal, and heavy chemicals were vital. The Second Plan was conceived as a

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[1]Dewit and Yarma, op. cit., p. 418.

major step towards industrialization, and the relative share of industries and mineral increased from 4 percent to 20 percent. It not only sought to lay the foundations of industrial progress on a wide front, but attempted to rebuild rural India and endeavored to advance toward socialist pattern of society.[1]

This meant that the basic criteria for determining the lines of advance was not private profit but social gain. Major decisions regarding production, distribution, consumption, and investment— and in fact the entire pattern of socio-economic relationship— had to be made by agencies informed by social purpose. The benefits of economic development must accrue more and more to the relatively less privileged classes of society. There should be a progressive reduction in the concentration of incomes, wealth, and economic power.

India's political institutions reflected a synthesis of the political heritage of the western democracies. India's stated aim was to develop the economy on the basis of private ownership, but with state ownership of enterprises beyond the capacity of private industry or vested with an overriding public interest.[2] But the bulk of the people lived so close to the margin of poverty that the claims of social justice, of the right to work, of equal opportunity, and those of equitable distribution were equally met. The great problem in economic development was capital accumulation. It was difficult to see who was going to save or to invest in India, since the whole society was

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[1] Issues in Social Science, op. cit., p. 190.

[2] Ibid., p. 191.

poor. The assumption was that the government would have to take major steps in economic development.

The use of modern technology requires large-scale production and a unified control and allocation of resources in certain major lines of activity. In India the central government assumes the leadership but relies heavily upon the states, the people, and private industry, both in planning and in operations. All industries were classified into categories according to the part which the government was to play. In the first category, the further development of industries was to be the exclusive responsibility of the state. Included were such industries as arms production, atomic energy, iron and steel, shipbuilding, railways and telephones. In the second category, the state was expected to take the initiative in establishing new state-owned enterprises. Private enterprise was expected to supplement these efforts. This list included road and sea transport, aluminium, and certain other machine tools, and fertilizers and certain chemical products. The third category included all the remaining.[1]

In comparing these two plans, the First Plan was very modest, while the Second Plan was very bold and ambitious. Strictly speaking, the First Plan was not a plan, but largely a stringing together of these projects of the central and state governments which were already in execution or had been drawn up in a piecemeal fashion. The Second Plan, on the other hand, was a well thought-out and integrated one with proper priorities fixed.

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[1]Berkowitz, op. cit., p. 39.

The most significant difference, however, lay in respect of the relative emphasis between agriculture and industry. While the First Plan laid far greater stress on agriculture, the Second Plan was definitely industry-oriented. In the First Plan, industry was assigned only 4 percent of the total outlay in the public sector, while in the Second Plan the corresponding proportion was 20 percent. Further, most of the provision for industries in the First Plan was not for industrialization but for the fuller utilization of excess capacity. The Second Plan, on the other hand, was primarily calculated to secure rapid industrialization, with main stress on heavy industry and capital goods industry.

Looking at the First Plan itself, which concentrated on agriculture, it should be recognized that agricultural productivity in India always depends on the monsoon weather and rain. Since India invested quite a large percentage on agriculture, what would happen if crops failed? Naturally, this would put India in a worse position, and it would be hard for her to get on her feet again. Luckily, the monsoon favored the plan's objectives. In agriculture, generally speaking, targets were achieved and even surpassed. Agricultural production rose by 20 percent in the case of food-grains, 45 percent in that of cotton, and 8 percent in that of oil-seeds.[1] Would more achievement be reached under the balance of industry and agriculture of the First Plan? In other words, only 4 percent invested in industry was like a drop of water in a bucket.

In the Second Plan, on the other hand, too great an emphasis was placed on heavy industry and too little on education and other essential areas. Agriculture

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[1]Towards a Self-Reliant Economy, op. cit., p. 43

TABLE VII

ACHIEVEMENTS OF FIRST TWO PLANS AND PRINCIPAL TARGETS OF THIRD PLAN

	Achievement			Target	% increase in 1965-66 over
	1950-51	1955-56	1960-61	1965-66	1960-61
Index number of agricultural production (1949-50=100)	96	117	135	176	30
Food grain production (million tons)	52.2	65.8	79.3	100	26
Nitrogenous fertilizers consumed (thousand tons of nitrogen)	55	105	230	1000	335
Cooperative movement (Advances to farmers) ($ million)	48.09	104.16	420	1113	165
Area irrigated (net total) (million acres)	51.5	56.2	70	90	29
Index number of industrial production (1950-51=100)	100	139	194	329	70
Production of:					
Steel ingots (million tons)	1.4	1.7	3.5	9.2	163
Aluminum (thousand tons)	3.7	7.3	18.5	80	332
Machine tools (value in $ million)	0.71	1.64	11.55	63.0	445
Sulfuric acid (thousand tons)	99	164	363	1500	313
Petroleum products (million tons)	—	3.6	5.7	9.9	70

TABLE VII

CONTINUED

	Achievement			Target	% increase in 1965-66 over
	1950-51	1955-56	1960-61	1965-66	1960-61
Minerals:					
Iron ore (million tons)	3.2	4.3	10.7	30	180
Coal (million tons)	32.3	38.4	54.6	97.0	76
Exports (million tons)	1,310.4	1,278.9	1,345.5	1,785	32
Power					
Installed (capacity) (million Kw)	2.3	3.4	5.7	12.7	123
Railways					
Freight carried (million tons)	91.5	1.14	1.54	245	59
Road transport: Commercial vehicles on road (thousand)	116	166	210	365	74
Shipping tonnage (million grt)	.39	.48	.90	10.9	21
General education: Students in schools (million)	23.5	31.3	43.5	63.9	47
Technical education: Engineering and Technology—degree level-intake (thousand)	4.1	5.9	13.9	19.1	37
Hospital beds (thousand)	113	125	186	240	29
Doctors (practicing) (thousand)	56	65	70	81	16
Consumption level:					
Food (calories per capita per day)	1800	1950	2100	2300	10
Cloth (yard per capita per annum)	9.2	15,5	15.5	17.2	11

Source: Information Service of India, India: Some Facts (Washington, D. C., 1964), p. 57.

received less funds for development in spite of the urgent need for increased agricultural productivity.

Third Five-Year Plan. The draft outline of the Third-Year Plan was published in July 1960 and the final draft was approved by the Parliament in August 1961. The Third Plan came into force with retroactive effect on April 1, 1961. The approach of the Third Plan was basically a continuation and enlargement of the approach of the Second Plan. The Third Plan was to carry forward the task undertaken in the first two plans and to provide for an acceleration of the effort undertaken so far. The broad aims defined in the plan are:[1]

1) To secure during the next five-year period a rise in national income of over 5 percent per annum, the pattern of investment being designed also to sustain this rate of growth during subsequent plan periods.

2) To achieve self-sufficiency in food grains, the increase agricultural production to meet the requirements of the industry and export.

3) To expand basic industries like steel, fuel, and power, and establishing machine capacity, so that the requirements of further industrialization can be met within a period of 10 years or so mainly from the country's own resources.

4) To utilize to the fullest extent possible the manpower resources of the country and to ensure a substantial expansion in employment opportunities.

5) To establish progressively greater equality of opportunity and to bring about a reduction of inequalities in income and wealth and a more even distribution of economic power.

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[1] Third Five-Year Plan, Planning Commission, Government of India, 1961, p. 48.

In short, one of the principal aims of the plan was to secure a marked advance towards self-sustaining growth. Basically, self-sustaining growth implies that savings and investment in the economy rise sufficiently to secure a high rate of growth of income on a continuing basis.

Self-sustaining growth can only be achieved by balanced development in both agriculture and industry. Income and employment cannot rise sufficiently without industrialization. On the other hand, an industrial revolution cannot be achieved without a radical improvement in agricultural productivity. Thus, the objective of the Plan was both to raise the capital base and to raise the output of food and raw materials. In this country with relative abundance of manpower, expansion of employment opportunities became an important objective.

The Plan aimed at raising the level of income of the economy by about 11 percent by the end of the Second Plan to about 14 percent by the end of the Third Plan. The rate of domestic savings at present is around 8.5 percent of national income. This is to be raised to about 11.5 percent by the end of the Third Plan, the balance representing the inflow of resources from abroad.[1] As for national income, the Plan aims at increasing it by more than 5 percent per annum or 25 percent during the whole period of the Plan.

The share of power in the aggregate outlay in the Second Plan was 7 percent; in the Third Plan it will go up to 10 percent. In absolute terms, the outlay on "power schemes" in the Third Plan is double the expenditure in the Second Plan. In the Second Plan, transport and communications claimed as much as 21 percent of the aggregate public sector outlay. In the Third Plan

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[1]Dewit and Yama, op. cit., p. 432.

TABLE VIII

DISTRIBUTION OF OUTLAY IN FIRST AND SECOND PLANS

Sector	Second plan		Third plan	
	Total	Percentage	Total	Percentage
Agricultural and community development	530	11	1,068	14
Major and medium irrigation	420	9	650	9
Power	445	10	1,012	13
Village and small industries	175	4	264	4
Organized industry and minerals	900	20	1,520	20
Transport and communications	1,300	28	1,486	20
Social services and miscellaneous	830	18	1,300	17
Inventories	—	—	200	3
Total	4,600	100	7,500	100

Source: Third Five Year Plan, Planning Commission, Government of India, 1961, p. 33-58.

that share is reduced to 17 percent. A very noteworthy feature of the pattern outlay is in respect to agriculture, community development, and irrigation. Their share in the total public outlay rose from 12 percent in the Second Plan to 14 percent in the Third Plan. A new item provided for the Third Plan is that of inventories. Since in the Third Plan period a number of public sector projects are likely to be in production, requisite provision for the increases in stock of raw materials, stores, etc., in respect of these projects has to be made.

The share of social services has slightly gone down in the Third Plan. It was 19 percent in the Second Plan, but stood at 16 percent in the Third Plan.

The Third Plan represents an important phase in the development of the country's economy. In the course of the first two Plans, the field of organization and the administrative machinery for agricultural development have been greatly strengthened. The development of the steel industry and of mining, power and transport provide the nucleus for more advance in industrialization. The chief task of the Third Plan is to accelerate the tempo of development so that, given another Five Year Plan, the country reaches what economists call take-off stages for a self-sustained economic growth.

Appraisal. The key purpose of India's planning since 1951 has been to make up for the historical lag through a rapid industrialization program. There are, of course, other objectives and it is true that the First Plan stressed agriculture and was modest in its size and scope. This was a result of India's shortage problems of war, reconstruction, and partition. Yet even in the First Plan, the outlines of fundamental thinking about planning in India were beginning

to emerge. There was, for example, the concept of mixed economy, with the private and public sectors sharing economic activity. However, basic problems remained, notably the unemployment in the cities and the failure to launch a significant attack on industrialization—the key long-run problem. Danile L. Spencer writes:[1]

> Utilizing the momentum of the First Plan, the Second Plan was characterized as a bold approach to industrialization. Its model (essentially Keynesism) was based on the concept of injections of investiment in state-owned industry, particularly heavy industry, into the economy. The resulting monetary demons was to be met by an expansion of consumer goods in the small sector of handicrafts and agriculture. This "bold plan" was designed to develop basic industries which would make up for long lay in industrial development. India was to become a self-sustaining industrial economy without the hardships of consumer sacrifice attendant on industrialization programs elsewhere.

What happened is fairly well-known. Even before the commencement of the Second Plan, things began to go wrong. A strain on resources, both internal and external, was felt almost immediately. Wholesale prices began to rise in the last months of the First Plan (ending in March 1956). The balance of payments position deteriorated rapidly. Repeated current account deficits took away the large stering balances and other foreign exchange reserves accummulated in World War II. Clearly the plan was "over-ambitious" in the framework of a market-type economy. Consequently, in May 1958, the Plan was cut from Rs. 4,800 crores (about $9.6 billion) to Rs. 4,500 crores of public outlay. Moreover, the rise in prices had meant a decline in real

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[1]Daniel L. Spencer, "India's Planning and Foreign Aid," Pacific Affairs, XXXIV (1961), 28.

achievement estimate at about 15 percent. Income (national and per capita, at 1948-49 prices) declined in 1957-1958.[1]

The principal difficulties have been: (1) lack of foreign exchange resources; (2) difficulty of securing loans; (3) difficulty of developing internal financial resources; (4) bad monsoons and other inflationary rise in prices; (5) difficulty of obtaining know-how; and (6) scarcity of essential materials.[2]

At the heart of the breakdown was the food situation. The clear inference is that India's Planning success is still dependent on the monsoon. The failure of food grain production to rise sufficiently, or even to maintain previous grains is a central factor making for inflationary conditions, which have violated much of the Second Plan. The other major obstacle is the foreign exchange crisis, arising first from the increased need to import food (attendant on the continuous increase in demand for food), and the increased defense outlays caused by fear of India's neighbors. Thus, in aggregate, the rise in prices and the foreign exchange crisis are manifestations of the failure of savings to rise to match investment. It can be seen that these problems are interrelated. If one problem arises, it stimulates the other to a rise also.

Now it must be recognized that the Third Plan, which will be complete in 1966, is a continuation of the Second Plan structure and strategy. As in the Second Plan, the outline of the Third Plan stress the physical targets of expanded

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[1]The information came from Planning Commission documents: Appraisal and Prospects of the Second Five-Year Plan, May 1958; Reappraisal of the Second Five-Year Plan: A Resume, September 1958 (New Delhi: Government of India Planning Commission, 1958).

[2]Dewit and Yarma, op. cit., p. 424.

large-scale industry. Agriculture, community development, and irrigation are to receive a somewhat larger relative allocation of public outlay than the Second Plan. Above all, the Third Plan represents an investment effort about 60 percent greater than in the Second Plan.

It has been fairly known, since 1963-1965, that the output in food grain has remained static, and the threat both of China and Pakistan had compelled India to triple her defense expenditure in 1965 over 1961. In 1960- 1961 Indian defense expenditure was Rs. 2,820 million, while in 1964-1965 it is increased to Rs. 8,539 million.[1] One can predict quite easily that under the Third Plan: The industrial program will probably advance slowly, targets being somewhat behind schedule. A more and more complex industrial economy will rise, which in turn will require still more support in maintenance, replacement, and raw material inputs. Scarcity of foreign exchange for critical items, in spite of larger aid, will create bottlenecks in industrial programs as the economy grows more complex. Above all, food shortages will continue to plague the economy, and dissatisfied urban consumers will still exist on a starving diet. The person's lot, in spite of commodity development schemes, is not likely to be improved without a more serious land reform than has yet been put into effect. Moreover, new problems will arise. For example, oil needs will be much greater and may become a critical bottleneck before the end of the Third Plan.

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[1] K.Krishma Moorthy, "Rearmament Plants," Far Eastern Economic Review XLIV (1964), 370.

CHAPTER IV

COMPARATIVE ECONOMIC GROWTH IN THAILAND AND INDIA

Thailand

Under the leadership of Field Marshal Sarit Thanarat, the Thai Government regarded the promotion of the economic and social welfare of the people as a keystone policy. Although Sarit made himself a fortune in the process, and a scandal broke out after his death, his government was instrumental in providing a high degree of economic prosperity and social advancement. With the help of economic assistance from the United States and other friendly nations (Great Britain, Australia, and New Zealand), as well as from various international agencies, Thailand made rapid strides in building new roads, erecting hydroelectric and irrigation facilities, diversifying its agriculture and increasing the yield of its rice crop, and building new schools and health centers. These advances were made without serious inflationary pressures or economic disallocations. David A. Wilson wrote:[1]

> The Sarit regime presided over and was not without influence in the rapid development of the economy of the country. Moreover, some hard decisions were made, such as the allocation of substantial resources for the development of the neglected provinces of the Northeast. Economic

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[1] David A. Wilson, "Thailand—Scandal and Progress," Asian Survey, V (February, 1965), 111.

development was solid during the period of his regime and continues to be. Growth of output has risen from the rate of 5 per cent in the fifties to 6.5 per cent. Rate of savings is 15.2 per cent compared with 10.2 per cent in the early fifties. Part of the credit for these advances must be given to the stable political conditions and the beginnings of planning which were Sarit's policies.

Growth of the GNP. Since the launching of the Six-Year Development Plan, covering the period from 1961 to 1966, Thailand has made fairly rapid progress in its economic development. Up to 1962, the GNP had risen at a rate somewhat faster than envisaged in the Plan. According to the report made by the National Economic Development Board in 1964, the average growth in output during this period is estimated at around 6 percent annually, and compares with the national growth targets proposed in the original Plan of 5 percent per year. In 1962 the GNP market price was estimated at 61.44 billion baht. This figure represented an increase of 7.5 percent over that recorded in 1961. The per capita gross national product at market prices was 2,194 baht, which showed a rise of 4.5 percent over the 1961 level.

The non-agricultural sectors continue to expand at a faster rate than the agricultural sector, the share of which decline to 36 percent of the GNP, compared with 38 percent in the previous year. Wholesale and retail trade accounted for 17.7 percent, manufacturing 11.9 percent, services 11.6 percent, transport and communications 9 percent, and the construction sector 6.7 percent of the GNP. [1]

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[1] The Colombo Plan: For Co-operative Economic Development in South and South-East Asia (Bangkok: Government House Printing Office, 1964), p. 235.

Capital formation was high, estimated at about 18 percent of the GNP. Government expenditure on industrial development projects was substantially higher than originally planned--from 451 million baht to 821 million baht. However, there were some expected delays in executing certain programs in the transport, communications, and social service sectors.

The rate of growth of the Gross Domestic Product was 6.6 percent. In 1962, private consumption expenditures absorbed 70 percent of the gross domestic product, whereas government consumption expenditure constituted only 11.7 percent in the monetary terms—3.1 billion baht and 7.2 billion baht, respectively.[1]

Agriculture. Agricultural development on the whole made satisfactory progress during 1961-1963 even though some governmental projects were slowed by technical problems, difficulties in preparing foreign applications, and other obstacles.[2]

Production in the agricultural sector increased by 6.1 percent. The production of rice went up by 11 percent, rubber 5.3 percent, maize 8.7 percent, and cassava 30.4 percent.[3] The policy of crop diversification adapted by the government was bearing fruit. The estimated value of increased agriculture production was 5.150 billion baht. During the year 1961 more acreage of high-yielding rubber was planted. In 1961 some 340,850 metric tons of

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[1]Ibid.

[2]The National Economic Development Plan, op. cit., p. 19.

[3]The Colombo Plan, op. cit., p. 236.

TABLE IX

ECONOMIC INDICATORS OF THAILAND

	Monthly average				
	1960	1961	1962	1963	1964
Currency in cir.[a]	—	696	747	763	812
Gold and for. ex. res.[c]	321	387	470	526	565
Commercial bk. dem. deps.[a]	325	379	386	427	489
Commercial bk. times deps.[a]	93	125	249	375	490
Cheques cleared[a]	397	476	538	590	979
Exports F.O.B.[a]	72	83	80	81	115
Imports C.I.F.[a]	80	85	95	102	134
Terms of trade[b]	105	102	108	109	110
Whole. price index[b]	92	100	106	9	94
Cost of living index[b]	94	101	105	105	104

[a]Ten million bahts (0,000,000)
[b]1958 = 100
[c]U.S. $ million
Source: Bank of Thailand Monthly Report (Bangkok, 1965).

TABLE X

PRODUCTION OF PRINCIPAL CROPS AND FOREST PRODUCTS

	Production (metric ton)			
	1961	1962	1963	1964
Rice	8,176,626	9,279,478	10,168,380	9,339,548
Rubber	186,000	195,363	188,293	n.a.
Coconuts	1,041,986	1,128,618	1,147,001	n.a.
Maize	598,276	665,429	857,743	953,500
Sugar cane	3,983,544	3,154,646	4,739,944	6,615,000
Soybeans	24,139	30,023	33,013	39,800
Jute	11,642	6,690	6,910	n.a.
Kenaf	337,284	134,048	211,696	287,500
Tobacco	48,447	47,945	46,609	n.a.
Teak	105,665	123,324	143,977	143,199
Yang	319,462	377.959	462,039	536,723
Other wood	857,781	856,812	1,077,056	1,136,586

Source: National Statistic Office, Bulletin of Statistic, XIII (1965), 21-25.

vegetables (on 6,412,504 rais[1]) and about 210,000 tons of pulses and fruits (on 36,448,725 rais) were produced. Improved varieties of rice seed were distributed over 294,200 rais at the request of some 48,000 stock seed farmers.[2]

The revised national policy was rapidly maintained that at least half of the total area of the Kingdom was to be set aside permanently as forest. In forestry, about 139,617 rais of teak and other trees had been replanted in 1961 and other 1,544, 437 rais of teak and 593,064 rais of other forests have been improved.[3] Teak occupied fifth position. Most of the teak exported, went to such European markets as Denmark, West Germany, the United Kingdom, and the Netherlands. Among Asian markets exports were made to Hong Kong and Singapore.

In 1964, also in the agriculture sector, production of most of the major commodities was increased. Maize output was 10.7 percent more than in 1963 while output of kenof increased by 13.61 percent in the same period. One commodity that did exceptionally well during the year was sugar cane, output of which increased in 1964 by nearly 42 percent over the 1963 figure. The output of soy beans also increased by about 20 percent. Due to heavy floods over some of the major rice growing regions of the country, however, paddy production

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[1]One acre is equivalent to 2.5 rais.

[2]The Far Eastern Economic Review, 1963 Yearbook (Hong Kong: Far Eastern Economic Review Limited, 1962), p. 236.

[3]Ibid.

TABLE XI

AGRICULTURE PRODUCTION AND TARGETS, 1959-1963

Item	Unit	Production					Plan target 1963
		1959	1960	1961	1962	1963	
Paddy	(000 M. T.)	6,770	7,834	8,247	9,254	9,500	8,100
Maize	(000 M. T.)	317	544	598	665	675	634
Cassava	(000 M. T.)	1,083	1,222	1,726	2,077	2,200	1,250
Rubber	(000 M. T.)	174	171	186	195	198	185
Teak	(000 cu. meters)	163	154	106	123	100	130
Other woods	(000 cu. meters)	1,050	1,112	1,177	1,220	1,286	1,270
Marine and fresh water fish	(000 M. T.)	206	209	306	312	335	310

Source: Economic Development Plan (Second Phase, 1964-1966) NEDB, Government of Thailand, January 1964, p. 20.

declined during 1964, by about 5.2 percent below the 1963 figure.[1]

The most important items of export continued to be rice, rubber, kenaf, jute, maize, and tin. However, rice declined, with corresponding gains by rubber, maize, kenaf, and tapioca. The output of paddy in 1962 was 9.5 million tons, and apparently there was the similar increase in the yield per rai, which rose from 219 kilograms in 1961 to 246 kilograms in 1962 according to the preliminary result of the 1963 Agriculture Census. The output of rubber, in spite of a decline in world prices, increased to 195,400 tons in 1962. The value of Thai exports increased by only 6.7 percent. The trade deficit, as a result, decreased by 58.5 percent. In 1963, imports exceeded exports by 24.4 percent, whereas 1964 exports were only 9.5 percent less than imports.[2]

In terms of value, maize exports in 1964 were 64.4 percent more than those of 1963, while kenaf and jute exports rose by nearly 39 percent more than in 1963. Although the volume of tin produced in 1964 was only about 1.4 percent more than that of 1963, the export earnings increased by 34.5 percent, reflecting the rising price of this commodity in the world market. Export earnings of rice in 1964 were 28.6 percent higher than in 1963, and increases were also registered in such commodities as teak and other woods (24.7 percent), rubber (8.2 percent), and tapioca product (3.2 percent). The only major

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[1]Gopinath Pillai, "On the Upswing," Far Eastern Economic Review XLVIII (1965), 7.

[2]S. Krishniah, "Spotlight on Economics," Bangkok World 1964 Annual Review (Bangkok: Bangkok World Publishing, 1964), 23.

commodity that showed a decrease (8 percent) in export earnings as compared to 1963 was castor seed.[1]

Thailand's strongest trading partners continue to be Malaysia, Japan, Hong Kong, the United States, United Kingdom, and West Germany, with Indonesia one of the notable additions to the list. The latter came into the picture only after 1961 when she began to have government-to-government contracts for rice. Thailand's largest export markets were Malaysia, Japan, and Hong Kong. Japan purchased raw materials for her industries. Hong Kong imported from Thailand both raw materials and foodstuffs. Malaysia's most important import item from Thailand was foodstuffs.[2] The United States, which had been the leading importer of Thai goods up to 1965, now ranked fourth, although import values had increased.

Industry. The passing of the Industrial Promotion Act in February 1962 was a significant milestone in the economic history of Thailand. There were two interesting features in this Act. The first was that it was now possible to apply for promotional privileges even though a proposed enterprise was not listed among promotable industries. The second noteworthy feature of the Act was that income and business tax exemption was now extended from two to five years. To increase domestic saving, the interest rate of the government bonds was increased, and interest rates from commercial bank's deposits—both time

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[1]Pailai, op. cit., p. 8.

[2]The Colombo Plan, op. cit., p. 236.

and demand—were exempted from taxation.[1] To increase capital for industrial development, the Industrial Finance Corporation of Thailand was created in 1959 to finance the establishment, expansion, and modernization of private industrial enterprise and encourage the participation of private capital, both internal and external.[2]

As for the problem of too few skilled workers and managerial personnel, vocational schools and technical institutes are now being enlarged. In addition, through the promotion of foreign investment, foreign investors will bring in more skilled personnel, who will in turn train the Thai personnel.

Some 135 firms were granted promotion certificates under this Act, and it was expected that many foreign industrialists would seize the opportunities offered by it. The output of the 78 factories established under the terms of the Industrial Promotion Act 1960 was expected to save the country a million baht worth of foreign exchange in 1961 and 1962. There were at the end of 1962 a total of 16,117 industrial factories of all categories in Thailand, of which about 8,052 were in the Bangkok-Thonburi metropolitan area.[3]

The industrial and mining production targets originally set forth in the Plan have, in general, been surpassed due to promotion schemes and growing

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[1] The Prime Minister's Speech Introducing the 2505 (1962) Budget to the Contituent Assembly (Bangkok: Prime Minister's Office, 1961), 13.

[2] The Industrial Finance Corporation of Thailand: A Guide to Its Proper Use (Bangkok: Industrial Finance Corporation of Thailand, 1960), 1.

[3] The Far Eastern Economic Review, 1963 Yearbook. op. cit., p. 237.

domestic demand. The performance for key industrial production is presented in Table IX in Chapter III. During 1964, increased economic activity was seen in the industrial sector, where some 2,094 industries were established, involving a capital investment of about 785 million baht. Though the number of industries established in 1963 was even higher, the capital investment was only about 200 million baht. In 1964 the government issued promotional certificates to 63 industries, whose total working capital is over 2,000 million baht. In 1963, 66 industries with a combined working capital of 1,700 million baht received promotional certificates. The registered capital of 1964 industries (509 million baht), however, was less than that of 1963 (527 million baht). The foreign share of registered capital increased from 36.2 percent in 1963 to 47.8 percent in 1964.[1]

Minerals. In general, the production of minerals in 1962 was significantly above 1959-1960 levels, with output of tin and concentrates approaching 15,000 tons, or 10.5 percent higher than in 1961. Lignite production was 195,000 tons, and gypsum 21,000 tons. The output of lignite was almost 40 percent higher than in 1959, but was not expected to reach the plan target of 420,000 tons in 1963, since the use of lignite as fuel is not as extensive as was originally assumed.

Electricity and power. The growth of electrical energy has been satisfactory. With installed capacity at 334,000 Kw in 1963 the Plan target of 370,000 was almost achieved. The building of the Yan-Hee Multipurpose Dam (Bhumibol

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[1]Pillai, op. cit., p. 8.

Dam) was completed on schedule in 1964. At present two turbines out of eight have already been installed. Each plant will produce 70,000 killowatts of electricity, which will be supplied to 36 provinces out of 71 provinces in Thailand. The remaining six will be installed when an increase in demand for light and power warrant their commission. The reservoir behind the dam contains 12,200 million cubic meters of water, extending more than 300 square kilometers. The project will make possible the irrigation of 182,000 rais of land.[1]

Communications and transport. Newly constructed and reconstructed national highways of about 500 km. were built during this period, but in general, highway construction and improvement fell behind schedule between 1961-1963. This was due to delays caused by lack of supplies, equipment, and personnel, and to slow progress in the acquisition of land. In 1962 a new eight-year highway program was launched to replace the original program. The construction and improvement of feeder roads also failed to make satisfactory progress because of the heavy concentration on maintenance and repairs of the existing roads and because a definite program had not been worked out.[2] This was due to the lack of a comprehensive study and survey toward the improvement and construction of new and better feeder roads for the country. The program for improvement of post offices and telegraph offices in Bangkok and Thonburi as well as in the provinces did not proceed as scheduled. The telecommunications program has

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[1]The National Economic Development Plan, op. cit., p. 55.

[2]Ibid., p. 23.

also been slightly slowed down largely due to difficulties in the feasibility survey and delays in loan negotiation.[1]

Education. Although the Development Plan set forth no specific targets in the field of education, the budget allocations for financing parts of the National Education Plan (560 million baht) were utilized special for education improvement and research programs. In general, the education program made satisfactory progress, especially in higher education.[2]

TABLE XII

PRODUCTION OF PRINCIPAL MINERALS, 1960-1965 (METRIC TONS)

	Period				
Production	1960	1961	1962	1963	1964
Tin-in-concentration	16,757	18,386	20,323	21,617	21,635
Wolfram in concentration	407	475	394	190	397
Lead ore	4,600	5,202	5,550	5,030	8,125
Iron ore	11,475	55,793	45,308	15,741	190,955
Gypsum	13,000	12,040	21,000	23,889	41,902
Fluorite	3,460	4,755	10,710	29,230	63,539
Lignite	107,783	108,396	135,225	137,075	103,634

Source: Department of Mineral Resource, June 1965, p. 27.

[1] Ibid.

[2] Ibid.

Appraisal

Owing to a sharp decline in the rate of mortality, population growth is increasing at the rate of 3 percent per year. It is possible that the population of Thailand will reach 50 million within the next two decades. In relation to the economic goals, agricultural productivity is still low and the industrial sector is not self-supporting. The transportation and communication systems are still not sufficient. The primary problem, however, is in the structure of the economy itself. Overwhelming dependence on a few exports, rice, rubber, tin, and teak—whose demand and prices are determined by world market conditions has made the Thai economy subject to wide fluctuations. Progress in the future requires basic changes in the economic structure. Agriculture will have to be more diversified, and a certain degree of industrialization will have to be attained.

India

India's initial First Five Year Plan was completely successful and even exceeded many of its targets. Her Second Five-Year Plan ran into difficulties. The Second Plan, which put greater stress on industrialization, naturally required heavier expenditures of foreign exchange. It ran into unexpected balance of payment difficulties from the very start and had to be reappraised in 1958. Stringent restrictions had to be imposed on less essential imports. Foreign exchange reserves had to be drawn down by Rs. 600 crores

in the Second Plan period.[1] On balance, she has nevertheless shown how a democratic union of private and public effort can produce a marked rise in living standards. An outstanding achievement during this period has been the laying down of firm foundations for a dynamic development which has resulted in an all-around growth. The economy has become more self-reliant and the ground has been well prepared for a more vigorous activity in the years to come.[2]

Hard lessons learned in the decade of effort will help guide India's future. Among other things, she has learned that her own efforts can be thwarted by forces beyond her control. For instance, the Suez crisis of 1956-1957 disrupted the pattern of international trade, with consequent injuries to India. For another thing, there was the major fact of the 1957-1959 global recession. As this recession was felt in many countries in addition to the United States, the market for the raw materials India had to sell was curtailed.[3] India, therefore, did not earn the foreign exchange she had hoped to get and which she meant to use in buying foreign-made machines for the industrialization at home. Meanwhile, a failure in the monsoon rains led to crop failure. Furthermore, disturbances on her external borders forced India to increase her defense program and to increase her purchases of arms from abroad.

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[1]Third Five-Year Plan, op. cit., p. 34.

[2]"Indian Economy: A Brief Resume," Indian News (Washington, D. C.: The Information Service of India, January 19, 1963), p. 6.

[3]Breakthrough (Friends of India Committee, Kaiser Industries Corporation, 1961), p. 19.

Compared with the nation's potential, India's economic progress during 18 years of independence is modest enough. Before independence, India had three steel mills. Today there are six, producing 4.3 million metric tons of finished steel in 1964, compared with 39.7 million metric tons for Japan. Where there was one oil refinery before 1947, there are now five.[1]

Let us take the developments in India during recent years and see what inferences can be drawn from them.

Investment. The country has been able to effect a marked increase in the rate of investment, especially in directions calculated to accelerate its economic development at a greater pace. Total investment, public and private, in the economy increased from over $1,050 million per annum at the beginning of the First Plan to $1,785 million at its end and attained an annual level of $3,360 million at the end of the Second Plan. In other words, the total investment during the decade 1951-1961 exceeded $21,231 million, of which the public sector accounted for $10,914 million and the private sector $10,290 million.[2] This appears from the fact that five-sixths of all the money invested in India in the past decade came from the resources of the Indian people themselves. The remaining one-sixth came in different forms from sources outside the country -- private investments, loans and grants by friendly governments, and assistance from international bodies like the World Bank.[3]

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[1]"India Without Nehru," Time, LXXXVI (August 13, 1965), 26.

[2]India News, op. cit., p. 6.

[3]Breakthrough, op. cit., p. 20.

National income. During the first ten years of economic planning, the national income of the country rose by 42 percent. During the First Plan period, owing largely to the progress recorded by agricultural production, national income increased by 18.5 percent as against targets of 12 percent. During the Second Plan period, on the other hand, the increase was 20 percent as against a target of 25 percent.[1] However, national income itself had increased only at the rate of 2.1 percent as against a target of over 5 percent per annum.[2] An improvement in the rate of growth of the national income of India is revealed by the latest estimates prepared by the Central Statistical Organization. The increase in 1962-1963 over 1961-1962 was only 1.9 percent, but in 1963-1964 there was a rise of 4.5 percent over 1962-1963. The rise was the net result of an increase of 1.9 percent under agriculture and 6.5 percent under the rest of the sectors taken together. In the first three years of the Third Five-Year Plan, there has been a rise of 9.3 percent in the net national output and of 2.3 percent in the per capita output at constant prices. The national income of India at constant prices (1948-1949) was Rs. 139,000 million in 1963-1964, as compared to Rs. 127,300 million in 1960-1961, the last year of the Second Five-Year Plan.[3]

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[1]India News, op. cit., p. 6.

[2]The Colombo Plan, op. cit., p. 64.

[3]"National Income Estimates," Indian and Foreign Review, II (1965), 8.

TABLE XIII

OUTLAY AND INVESTMENT: 1951-1952—1970-1971

Period	Public sector		Private sector	Total
	Outlay	Investment	Investment	Investment
1. First five-year plan (1951-56)	1,960	1,560	1,800	3,360
2. Second five-year plan (1956-61)	4,600	3,731	3,100	6,831
3. Third five-year plan (1961-66)	8,200[b]	6,300[a]	4,100[a]	10,400[c]
4. Fourth five-year plan (1966-71)	15,620	12,995	6,980	19,975
5. Total (1951-71)	30,380	24,586	15,980	40.566
6. Percentage share of public and private sector to total investment		60.6	39.4	100.0

[a]As given in the Third Plan document

[b]As given in the "memorandum on the Fourth five-year plan."

[c]Total investment at the end of the Third Plan, according to the memorandum on the fourth five-year plan, is expected to reach an aggregate of Rs. 11,700 crores at current prices.

Sources: Eastern Economist Annual Number, 1965 (New Delhi, 1964), p. 1341.

TABLE XIV

PERCENTAGE INCREASE IN REAL NATIONAL INCOME

	First plan 1951/52-1955/56 (Actual)	Second plan 1956/57-1960/61 (Actual)	Third plan 1961/62-1965/66 (Actual)
National income	18.5	19.5	30.0
Per annum	3.5	3.6	5.4
Per capita income	7.2	7.8	17.0
Per annum	1.4	1.5	3.2

Source: Third Five-Year Plan, Government of India, Planning Commission 1961, p. 35, 55.

Agriculture. Food grains contribute about a third of Indian national income and represent the dominant items of expenditure for a major portion of the population.[1] Although the percentage of increasing in food grains in 1960 was 44 percent over the production of 1950-1951, the target for 1956-1966 was set for 100 million tons. There is no chance of achieving this. The crises that confront India are grave indeed. First on the list is the perennial problem of providing enough food for a population that is growing at the rate of 3 percent a year. The cause of the last year's food crisis was simple enough. For three

[1]John W. Mellow and Uma J. Lele, "Alternative Estimates of the Trend in Indian Food Grains Production," Economic and Cultural Change XIII (1964), 39.

straight years, Indian grain production remained static at 80 million tons.[1] This was due to the bad monsoon. India had to double its normal import of grain from abroad, expending valuable foreign exchange in the process. The U. S. grain supply to India reached 6,650,000 tons.[2] Production of sugar declined by about 20 percent in 1962-1963, and there was also a decline in tea output.[3]

Over-all, agricultural production which had declined by 2.5 percent in 1959-1960 rose spectacularly by 8.1 percent in 1960-1961, but in 1961-1962 the increase was only 1.6 percent.[4] While in 1962-1963 the production had declined by 4.2 percent of that in 1961-1962, the 1964 production moved up 3.3 percent still below the production in 1961-1962.

This problem led Prime Minister Shastri to order the cutback in the industrial scheme laid out by Nehru, and cranked up a crash program of agricultural aid. Though industrial projects already under way (five billion worth of them) will be allowed to reach completion, a heavier effort for the next few years will go into quick-yielding small projects for farmers—wells, irrigation, and roads.[5]

The year 1964-1965 holds out the promise of a substantial improvement in agricultural production, according to the Annual Report of the Department of

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[1] Time, op. cit., p. 26A.

[2] Ibid.

[3] The Colombo Plan, op. cit., p. 65.

[4] Far Eastern Economic Review, op. cit., p. 18.

[5] Time, op. cit., p. 26A.

Agriculture, Ministry of Food and Agriculture for that year. On present indications, rice production is expected to be about 2 million tons higher than the previous years record level of 36.5 million tons. Prospects of cotton and jute appear to be fairly satisfactory while groundnut production is expected to surpass the record level reached in 1963-1964. The report states that during 1963-1964 an area of 83 million acres was covered under food grain seeds and the anticipated coverage during 1964-1965 is 102 million acres. The area expected to be benefited through minor irrigation works during 1964-1965 is estimated at 3.3 million acres, taking the overall figure to 9.7 million acres during the current plan. To a large extent, this is attributable to the favorable weather conditions at the time of sowing. Weather conditions also helped the improvement in yield, which has gone up by 3.7 percent as against 1.3 percent in 1963.[1]

Industry. The increase in investment during the two plans enabled industrial production to exceed the targets in many branches of the industry, such as power-driven pumps, diesel engines, electric motors, electric fans, and sugar. Production targets in the most other industries, excepting a few items of industrial machinery, like cement and certain chemicals, were fulfilled. The index of industrial production with base 1956 was 136 at the Second Plan. In 1964 it was increased to 171.9.

An impressive achievement during this period was the setting up of the three steel plants of a million tons ingot capacity each in the public sector

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[1]Eastern Economist Annual Number 1965, op. cit., p. 1367.

TABLE XV

FOODGRAIN PRODUCTION IN INDIA: 1955-66—1963-64 ('000 METRIC TONS)

Commodity	1955-56	1960-61	1961-62	1962-63 Partially revised estimates	1963-64 Final estimates
Rice	27,557	34,195	34,807	31,914	36,489
Wheat	8.760	10,992	12,039	10,829	9,708
Jowar	6,725	9,363	7,741	9,621	9,227
Bajra	3,428	3,228	3,554	3,892	3,736
Maize	2,602	4,015	4,269	4,578	4,527
Ragi	p,846	1,681	1,873	1,891	1,852
Barley	2,815	2,866	3,152	2,423	1,985
Small millets	2,070	1,975	1,970	1,860	2,031
Total	55,803	68,318	69,406	67,008	69,555

Source: Eastern Economist Annual Number 1965 (New Delhi, 1964), p. 1351.

at Bhilai, Rourkela, and Dangapur, and the completion of the modernization and expansion programs of the two private sector steel factories. This increased the capacity by another 1.5 million tons of ingot steel. The value of increased output is of the order of $420 million per annum.[1] The steel industry is set for further expansion, the target for the Third Plan being 10.2 million ingot tons.[2]

Another important influence during the decade has been the rapid growth of many machine-building industries. India is now producing progesssively increasing quantities of machine tools, and machinery for use in agriculture, chemicals and pharmaceuticals, textiles, jute, cement, tea, sugar, flour, oil mills, paper, and mining. The total production of machinery and capital equipment, which hardly amounted to $10.5 million at the beginning of the last decade, increased to nearly $420 million at the end of this period. The target for the Third Plan is fixed at the high level of $1,050 to $1,260 million per annum.[3]

There has been a progressive increase in net investment since the announcement of the First Plan in 1951. In the early years, it was below 4 percent of the national income. Toward the end of the Plan, it increased to about 6 percent. It gradually improved to about 11 percent towards the end of the Second Plan period, and it is proposed to step up investment to 14 percent

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[1]India News, op. cit., p. 7.

[2]Third Five-Year Plan, op. cit., p. 64.

[3]Ibid.

TABLE XVI

INDUSTRIAL PRODUCTION TRENDS OF SOME PRODUCTS 1960-1964

Industry	1960	1961	1962	1963	Jan.-Aug. 1964
Coal (million tons)	52.6	56.1	61.5	66.9	42.8
Iron ore (million tons)	10.7	12.3	13.2	14.8	9.6
Finished steel	2.2	2.9	3.8	4.3	2.8
Aluminum ('000 tons)	18.4	18.4	35.4	53.9	37.0
Machine tools (Rs. million)	66.9	85.2	118.2	179.9	139.1
Automobiles (000 nos)	52.1	54.3	57.8	52.2	44.0
Bicycles (000 nos)	1,050	1,049	1,116	1,187	825
Motor cycles (100 n os)	4.0	8.7	8.8	9.0	5.4
Cotton yarn (million kgs.)	788	862	859	892	626
Jute textiles (1000 tons)	1,085	970	1,181	1,236	721.1
Sugar (million tons)	2.6	28	2.3	2.3	1.7
Tea (million kgs.)	316	348	343	343	97
Coffee (1000 tons)	52	67	48	58	53

Source: Eastern Economist Annual Number 1965 (New Delhi: 1964), p. 1364.

by the end of the Third Plan. The rate of savings is to be raised from about 8 percent of the national income to about 11 percent by 1965-1966.[1]

Education, health, and social services. There has been all-around development in education, special emphasis being placed on development facilities for technical education in order to promote industrial development. Scientific and technological research have received priority and a large number of new research institutions have been established.[2] From 1951 to 1961, 85 percent more children were in schools, a total of 44 million. Some 15 percent more children were in primary schools alone. There were 159 percent more young men and women in the colleges for a total of 1,052,000, with a fourfold increase in students taking engineering, technological, and professional training. In 1965 the school-going children as percentage of children in the respective age groups is as follows: age group 6-11, 77.8: age group 11-14, 31.6.[3] A nationwide malaria control program has cut the incidence of malaria from 75 million to 10 million cases a year. Some 120 million people vaccinated in a national tuberculosis control program. There was a start on India's first rural health service, with 2,800 health centers. There are 14,000 more

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[1]Towards a Self-Reliant Economy, op. cit., p. 17.

[2]India News, op. cit., p. 7.

[3]Eastern Economist Annual Number 1965, op. cit., p. 1428.

doctors and 12,000 more nurses.[1]

Irrigation. At the commencement of the First Plan, the irrigated area from all sources was 51.5 million acres, of which 22 million acres were irrigated from large and medium projects. The overall ultimate irrigation potentialities from major and medium irrigation projects are expected to be about 100 million acres (gross), and from minor irrigation including small reservoirs, tube wells, open wells, etc., about 75 million (gross). The total irrigated area from all sources stood at 56 million acres in 1955-1956, increasing to 70 million acres at the end of the Second Plan Period. The target for the Third Plan is 90 million acres.[2] Since 1956-1965 the schemes taken during the first three plans have an aggregated potential capacity of about 44 million acres, bringing the total to 100 million acres.[3]

Atomic energy. The Atomic Energy Commission is responsible for planning and implementing the program for the development of atomic energy for peaceful purposes. The program aims at the encouragement of the uses of atomic energy in agriculture, biology, industry, and medicine, mainly through the production and application of radioisotopes; and at the development of atomic energy as a source of electric power. Among the schemes included in the Third Five-Year Plan are: (1) the setting up of a Radiation Medicine Center where medical workers will be trained in the handling of radioisotopes in research,

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[1]Towards a Self-Reliant Economy, op. cit., p. 16-17.

[2]India: Some Facts, op. cit., p. 68.

[3]Indian and Foreign Review, II (1965), 10.

diagnosis, and therapy; (2) expansion of fundamental and applied research in diverse aspects of cancer and several other diseases with the help of radio-isotopes in close collaboration with Indian Cancer Research Center and the Tata Memorial hospital.[1]

The economy of India is changing. What is happening is essentially a major revolution, and her 450 million people are engaged in a fascinating adventure. The policy embodies in the government's Five-Year Plans is to evolve a highly diversified industrial structure in which there is balanced development of heavy industries, organized consumer goods, industries, and small scale and cottage industries. India is now nearly completed through the Third Plan which will come to an end in March 1966.

To summarize the economic growth between Thailand and India, the following Table includes comparative economic statistics between these two countries. The comparison is sharpened by the inclusion of Japan, the most highly developed country in Asia.

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[1]India: Some Facts, op. cit., p. 72.

TABLE XVII

PERCENTAGE DISTRIBUTION OF GROSS NATIONAL PRODUCT, 1953-54 AND 1960-61

	Agriculture	Mining	Total primary	Manufacturing	Construction	Utilities	Total 4+5+6	Transport	Service
India									
1953-54	49.3	0.9	50.2	15.5	15.5	15.5	15.5	34.2	34.2
1960-61	45.5	1.1	46.6	15.5	15.5	15.5	15.5	37.9	37.9
Thailand									
1953-54	41.9	1.8	43.7	11.7	3.8	0.2	15.7	5.3	35.3
1960-61	39.4	1.5	41.0	11.2	5.6	0.3	17.1	7.7	34.2
Japan									
1953-54	22.0	2.8	24.8	24.0	4.7	—	28.7	8.7	37.7
1960-61	14.9	1.6	16.6	30.2	6.1	—	36.3	9.9	37.1

Source: United Nations, Economic Survey of Asia and the Far East 1963 (Bangkok: United Nations Publication, 1964), p. 36.

TABLE XVIII

COMPARATIVE ECONOMIC STATISTIC: THAILAND, INDIA, AND JAPAN

	India	Thailand	Japan
I. GNP in U.S. dollars per capita	72	100	140
II. Social Welfare			
A. Education			
1. School enrollment: Proportion of children 5-14 in primary schools	12	54	61
B. Percentage of total population in secondary and higher education	1.88	1.6	5.6
2. Literacy: Percentage of adults literature	15-20	50-55	97-98
C. Health			
1. Infant mortality: Infant death per 1000 live births	100	56	40
2. Physicians and dentists: Per 100,000 population	15	19	135
D. Cost of living: Index for capital city (1958 = 100)	—	106	117
III. External Relations: Direction of International Trade			
A. 1. Percentage of total exports to following regions			
a) Ecafe non-stering countries	9.6	29.3	13.6
b) Ecafe stering countries	7.8	36.4	12.7
c) United Kingdom	24.6	8.7	2.7
d) Western Europe	11.4	11.1	10.1
e) North American	21.5	8.8	30.6
Significance of International Trade			
B. 1. Total annual imports and exports in U.S. dollars per capita	.7	3.4	15.0
2. Total imports and exports as percentage of GNP	1	3	2
Trade dependency on raw materials: Raw materials as percentage of total export	60	98	14

TABLE XVIII

CONTINUED

	India	Thailand	Japan
Agriculture			
A. Agriculture productivity			
1. Yield in metrictons per hectares			
a) rice	1.6	1.4	4.7
b) sugar cane	44.4	34.3	34.9
c) ground nuts (in the shell)	.8	1.1	——
d) cotton	..1	.?2	——
2. 1962 Index of total agricultural production (1952-54 = 100)	——	117	146
B. Significance of agriculture			
1) Percentage of the net cosmetic product originating in agriculture, forestry and fishing	48.2	38.0	30.2
2) Cultivated land as percentage of total land area	48.14	15.61	13.65
3) Agriculture population: Percent of active population in agricultural occupation	71	85	39
C. Agricultural resource endowment			
1) Agricultural land: hectares per capita	.39	.38	.06
D. Commercial fertilizer consumption: kilogram per hectare of cultivated land	1.1	0.8	——
V. Industrialization			
A. Consumption of steel: Metric tons per 1000 population	7.4	4.3	82.0
B. Percentage of NDP originating in manufacturing and construction	17.4	17.5	37.1
VI. Economic Development Efforts:			
A. Private Vs. public participation			
1. Percentage of gross fixed capital formation by:			
a) Private enterprises	56.3	60.6	58.5
b) Government and public corps.	29.4	25.7	21.7
2. Central government expenditures as percentage of GNP	13	16	13
B. Capital formation			
1. Net fixed capital formation as percentage of NI	12.0	30.4	25.7

TABLE XVIII

CONTINUED

	India	Thailand	Japan
2. Composition of gross domestic capital formation			
a) Dwellings, buildings, and other construction	61.3	41.3	——
As a percentage of gross domestic capital formation			
b) Machinery and equipment, including transportation, equipment, as a percentage of gross domestic capital formation	30.0	45.0	——
3. Investment, including net loans, as a percentage of total government expenditure	52.8	21.9	25.9
c) Capital imports:			
1) Capital goods and materials chiefly for capital goods as a percentage of total imports	35.2	46.8	42.3
d) Defense expenditures as a percentage of total government expenditure	15.1	17.2	7.2
VII. Tax revenue sources			
A. Tax on income and wealth as a pure percentage of total tax revenues	29.0	10.3	60.1
B. Total customs duties as a percentage of total tax revenues	23.4	41.6	5.3
C. Sales taxes, licenses and registration fees as a percentage of total tax revenues	——	34.9	30.9

Source: Adapted from Laurence D. Stifel and Arthur A. Wichmann, Reports on Burmese Economics, (Rangoon, U. S. Agency for International Development), 1964, p. 47-50.

CHAPTER V

PROBLEMS OF ECONOMIC DEVELOPMENT IN THAILAND AND INDIA

Thailand

The Thai are proud that their kingdom, from the time of the Japanese occupation during World War II, has never known foreign domination. While political, social, religious conflicts swirl and boil in the sea of trouble that churns in Southeast Asia, Thailand is an island of comparative peace and prosperity. Although she, too, has her difficulties, they have been negligible compared to those of her neighbors.[1]

In order to maintain this happy position, Thailand has moved ahead with great care. The Bangkok Bank editorialized in its Monthly Review for July 1963 that the country tended to benefit both politically and economically by showing caution regarding membership in regional groupings in order to avoid any mistakes "that may be the result of rash actions." Realizing, however, that it would be unwise to shun all regional organizations, it went on to say, "Thailand is committed to the task of improving the standard of living of her people," and "to achieve this she has to strive for a higher degree of industrialization and for greater productivity in the agricultural sector. Moreover, she has to

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[1] Hugh H. Smythe, "Report From Thailand," Eastern World, XVII (1963), 15.

improve her export trade, which is one of the factors which dictates the tempo of economic development."[1]

Although the economy is growing, some basic economic problems exist. These include the rapid rate of population growth, the danger of unemployment, low agricultural and industrial productivity, high cost of capital, and the growing need for conserving natural resources.

Population. The rate of population growth has been steadily increasing. The annual rate of increase, given in Table XIX shows that Thailand has the highest rate in the region.

TABLE XIX

POPULATION: ANNUAL RATE OF INCREASE, 1950-1960

Country	Rate %	Country	Rate %
Japan	1.2	Napal	1.6
Hong Kong	2.8	Indonesia	2.0
India	1.9	Phillippines	3.1
Pakistan	2.1	Thailand	3.2
Ceylon	2.6	Burma	1.1
Federation of Malaya	3.2	Turkey	2.9
Singapore		Iran	2.2

Source: International Labor Review, "Reports and Inquiries, The Population and Labor Force of Asia 1950-80," LXXXVI (October 1964), p. 20

[1] Bangkok Bank Monthly Review, Bankgkok: Bangkok Bank Limited (July 1963), 35.

Declining mortality has been the chief cause of the rate of increase in all of these countries except Japan. In all these countries efforts are being directed to better medical services, improved sanitation, and to the provision of more wholesome food, especially for the young. Thus, even more accelerated rates of growth may be expected.[1] If the current rate of 3 percent per annum continues in Thailand, the present population of 28 million will reach a figure of about 50 million by 1982. The bulk of this population, approximately 46 percent, will be below 15 years of age. So far, the Thai Government has not planned decisively to reduce the rate of population increase, although she has joined the International Planned Parenthood Federation.[2]

The rapid increase in population will aggravate other basic problems, making it a more exacting task to raise the standard of living and the level of national income in the years ahead. The higher rate of population growth, the higher the income that must be generated to maintain existing levels of living. It will be difficult in a country like Thailand which already has a low per capita income to increase saving and investment. If the population is allowed to increase as in the past decade, this will make further development more difficult.

So far Thailand still does not have much of a population problem. And it is still not hard to solve. "There are several social and economic reasons why Asian countries have no social security system and children are the only

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[1]Silva Fernanda, "Family Planning in Asia," Eastern World, XVIII (1963), 13.

[2]Ibid.

source of economic security for people in the old age."[1] This is quite true in Thailand. As a rule, a Thai supports his parents no matter how meager his own income is. Thus to discourage parents from having many children it would be necessary for Thailand to guarantee an old age support for needy people without children. The burden of supporting the poor and childless old people will not be very heavy on the state, because there are not many of them. Together with the improvement of education, this would have a definite psychological effect on the people.

Production. The production of goods and services in Thailand is generally characterized by a low yield of almost all major crops—particularly rice, rubber, sugar cane, and kenaf. The cultivation of rice has provided the main staple food, the major single source of foreign exchange, and the main source of employment. Land in rice cultivation has increased steadily to supply both domestic and foreign demand. Uncultivated land, mostly forest, has been cleared and converted into rice fields. But technqiues of cultivation have not improved with the expansion of area. The relatively low farm indebtedness in Thailand is partly due to this lack of improvement and new farm investment.[2] The lands which have been brought under cultivation during the last few decades were increasing by marginal, permitting only a low yield per

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[1]Narsingh Deo, "Nowhere as Acute as Asia," The Asian Student, XIII (1965), S6.

[2]Eliezer B. Ayal, "Some Crucial Issues in Thailand's Economic Development," Pacific Affairs, XXXIV (1961), 157.

acre. Whatever increase in rice output is feasible in the future will require substantial investments. Moreover, different products will have to be developed with the widespread ramifications involved in such a change. Since Thailand, as with many other countries, wishes to join the rank of the developed countries, the change must be drastic.[1]

The other problem is that Thailand's economy is critically dependent on a few basic products—rice, tin, and teak. Over 3 million tons of rice are exported in 1963 (out of a total crop of over 10 million tons) but the market is becoming more competitive. Burma, Combodia, and South Vietnam are also rice exporters. Of the importing countries, Japan is now almost sufficient in rice, and Malaysia and Pakistan are working towards this goal. Indonesia, however, with its severe internal problems, and India and Ceylon, are still large importers. None of these traditional markets can be taken for granted. Even if the Thai surplus can be raised beyond the needs of an expanding population there is no guaranteed outlet for the future. In regard to other products, tin faces a strict quota imposed by the International Tin Commission, and rubber faces increasing competition from the synthetic product.

Institutional and entrepreneurial obstacles. Many manufacturing industries are being protected in the face of a complex of problems and difficulties. The economic literature usually states that low income does not permit enough savings to be diverted to the investments required to raise that income.

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[1] Ibid.

In Thailand, however, this aspect of underdevelopment is less important than the absence of aptitudes, attitudes, and institutions required by the modern economy. It is not so much the lack of savings that obstructs development, as the absence of progressive entrepreneurs to invest in than and institutions for channeling such savings to potential investors.[1] In 1954 the National Economic Development Corporation Limited (NEDCOL) was founded with great fanfare and substantial government support. NEDCOL enjoyed special government treatment ranging from relief from custom tariffs on imported equipment and unprecedented government guarantees on big foreign loans, to high administered prices and assured markets. However, no research was made as to the availability of raw materials, prospective competition, and similar pertinent information. Lack of experience and skills at all levels and misuse of funds by the top people caused the corporation, by the end of 1957, to go bankrupt. The contribution of private foreign capital to the economic development of Thailand has been modest, and most of that investment went into trade, not manufacturing.[2]

The other problem is that, as said in the Plan, Thailand is a "mixed economy," attempting to develop by the joint efforts of both the state and of the private sectors. Both the state and the private sectors are, therefore, called upon to coordinate their activities to achieve economic progress. But it is apparent that the necessary environment for "mixed economy" development is

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[1] Ibid., p. 158.

[2] Ibid., p. 159.

not present. Thailand's economic situation allows both state enterprises and private enterprises to operate simultaneously in many fields. At present, state industries in the field of weaving in gunny bag making, in sugar refining, and in paper manufacturing are being maintained by the state in spite of the fact that there are similar private factories. "The state, at the last count, owned 108 enterprises and it has minority holdings in 19 other business concerns. Between 1961 and 1963, 3,897 million baht were dispensed out of government's funds in maintaining 45 of these state enterprises."[1] In other words, the state had to support certain enterprises deemed to have been beyond the scope and abilities of private enterpreneurs. To some extent, the state is justified in making this assumption, but it is sometimes guilty of underestimating the potentialities of the private sector.

The state is justified if she can operate these enterprises most effectively. State enterprises should not have the backing of government if they are economically unsound and fail to break-even year after year. If the enterprise needs official support, then it is not only a drain on public funds but it also hampers the development of the private sector. A second factor hampering private development is that of several privately-owned enterprises are treated as state organizations, receiving official patronage. This results in unfair competition for similar firms in the truly private sector.

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[1]Paul Sithi-Amnuai, "A Problem of Planning," Far Eastern Economic Review, XLIV (1964), 301.

To solve the problem, the government should change some economic policy to see that the existing factors that hinder private sector development are eradicated. The other is to liquidate the state-owned enterprises that are operating at a loss.

As stated in an earlier chapter, about 80 percent of the Thai are farmers, so that the development of an entrepreneurial class has been rather slow in coming. Lack of tradition, experience, and proper attitudes have been major causes for this slowness. To this there should be added the still embryonic stage of development of financial institutions. Without adequate facilities it is difficult to channel savings into investments even when there are entrepreneurs willing to invest.

General Krit Punakan, then Minister of Industry, circulated to deputies in July 1958 a list of "Obstacles to Industrial promotion." These obstacles, which are worth giving in some detail, are:

> (1) A benevolent nature which has made it unnecessary to work too hard for food and clothes, and hot weather which makes it difficult for enduring work.
>
> (2) A sparse population, which results in lack of competition and lack of an adequate number of consumers to make establishment of certain industries worthwhile.
>
> (3) A lack of technicians.
>
> (4) Lack of the "spirit of industrialism," industry needs the spirit of endurance to overcome obstacles, take risks of loss, and wait for slow profit. Without it, people take up the civil service, and where they have capital, lend money for interest and rent land and houses, in which the returns are quicker.

(5) Inadequate budgetary allocation for Ministry of Industry.

(6) Lack of public support for domestic manufacturers; "Faults have been found by people who fail to realize that industries in Thailand are like infants learning to walk and need assistance and encouragement."

(7) Frequent changes of Government, resulting in lack of stable policy.

(8) Lack of understanding and cooperation between industrialists and government offices, which results in unresolved arguments as to whether imports should be prohibited to promote certain domestic industries or be allowed to continue to flow into the country, causing failure of local factories.

(9) Obstacles concerned with foreign investment. Thailand has the following disadvantages in this matter: (a) The population is too sparse to provide sufficient customers for certain industries. (b) Loss of investment is feared, particularly if the war break out. (c) There is fear of uncertainty of government policy. For example, the Ministry of Industry may have invited foreign investment in a certain industry requiring large capital. Protection should be given this industry, whose failure should not be brought about by the government setting up a similar factory in competition.

(10) Lack of adequate cheap power, which makes it necessary for industries to spend 25 percent of their capital to provide their own power. (This has been corrected since the Yan-Hee Hydroelectric project was completed in 1964.)[1]

Finally, transport services are not sufficient with respect to convenience and unit cost. Transportation will expand markets, facilitate the flow of goods, and change the structures of communities from self-sufficient to commercial communities. At the end of 1962 some kilometers of national highways were

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[1]D. Insor, Thailand: A Political, Social and Economic Analysis (New York: Frederick A. Praeger, 1961), 157. Quoted directly from Krit Punakan.

opened, in addition to municipal and provincial roads. Also in 1962, Thailand possessed about 3,519 kilometers of railroads.[1] Up to the present the number of kilometers of both railroads and highways has not increased much due to the difficulties of getting loans from outside.

Unemployment. Although unemployment has not yet become a serious problem in Thailand, where the vast majority of the population live in the rural areas, underemployment due to seasonal and other factors do exist. The present ratio of population to cultivated land is not yet too high to prevent reasonable economic returns in agriculture. During planting and harvesting seasons, the entire labor force in the village is occupied. Higgins, in connection with this kind of employment, points out that:[2]

> The optimism concerning development by absorption of disquised unemployment from agriculture was unfounded. It is not possible to transfer large numbers of workers permanently and full time from peasant agriculture to industry without a drop in agricultural output. Reorganization of agriculture and a shift to relatively extensive and mechanized techniques could release large numbers of workers from agriculture, to be sure, but, that requires a certain amount of investment in the agricultural itself.

However, if the present rate of population growth remains unchecked, unemployment can become a more serious problem, because traditional ways of providing employment will not be adequate. The economy will have to be

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[1] Economic Report of Thailand for 1963 (Bangkok: Office of the National Economic Development Board, 1964), 61-66.

[2] Benjamin Higgins, Economic Development: Principles, Problems and Policies (New York: W. W. Norton and Company, Inc., 1959), 353-354.

diversified, so that the huge labor force on the farms can be distributed among other occupations.

Changes in the balance between population and natural resources. The growth of population has brought about a change in the balance between population and natural resources. This has been accentuated by the pace at which natural resources have been exploited. As reported by the IBRD Mission, valuable forest and mineral resources have been used and the old balance can never be restored by conservation of fresh discoveries. A recent forest survey disclosed that forest resources are less than previously estimated. Unit cost of lumber production is going up and the volume of teak ready to cut is going down. The best tin deposits are nearly exhausted, and the stage has not yet been reached when other newly-discovered mineral deposits, apart from non-metallic minerals such as gypsum and lignite, can be worked on a commercial scale.[1] The depletion of natural resources underlines the need for measures of conservation, with a view to uncovering fresh mineral deposits. Particularly urgent is the need to preserve watershed areas and soil fertility through forest conservation and other land management measures.[2]

Other problems. Apart from the important problems mentioned above, there are another pertinent problems: the uncertainty of foreign markets for

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[1] The National Economic Development Plan (Bangkok: Office of the National Economic Development Board, 1964), 3.

[2] International Bank for Reconstruction and Development, A Public Development Program for Thailand (Baltimore: The Johns Hopkins Press, 1959), 3.

major export, the imperfection of the marketing and transportation systems, lack of skilled manpower, and an anachronistic civil service system.[1] Although the finances the education abroad of some Thai students, (and three to four thousand more were trained under American, United Nations, and Colombo Plan technical assistance programs), these few trained men are not well used when they return.[2] Job descriptions are virtually non-existent.

> A large proportion of Thais trained abroad end up in positions for which they are either underqualified, overqualified or entirely unsuited. It is common to meet well-trained and enthusiastic young men, anxious to put into practice what they have learned abroad, yet unable to make any impression on their seniors. By the time they have reached a position of authority, it was too late. Finally, low pay and poor promotion greatly contribute to low morale, slackness and inefficiency on the civil service. The level of pay is only one-half or one-third that of comparable occupations in private industry.[3]

This problem can be cured: First, the number of people employed by government should be reduced (at the present 60 percent of the budget goes to pay the salaries of government officials).[4] Second, pay and prospects should be improved. Third, strong action should be taken against inefficiency and abuse.

Political prospects. Field Marshal Sarit, in his speech on October 20, 1962, the fifth anniversary of the revolution, said:

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[1] D. Insor, op. cit., p. 171.

[2] Ibid.

[3] Ibid., p. 172.

[4] Ibid.

> We must be united and we must cooperate to protect our national sovereignity and help in maintaining national stability and progress. . . . Only advanced nations can bring happiness to their people . . . Economically backward countries are easy prey for the Communist menace.

He also said in what appeared to be a rationale for continued rule that "It is well known that if any nation loses political stability it will be difficult for it to protect and develop the country."[1]

For a quarter of a century, various Thai governments experimented with constitutional principles without success. Thai governments were often overthrown by coups d'etat, but these were usually mild affairs, and nearly always bloodless. Paradoxically, despite his avowed autocratic rule, Sarit was probably the most respected Prime Minister Thailand has had since the World War II.[2] He was a "benevolent dictator" who developed effective programs of peace and prosperity. The Thai people seemed to welcome the kind of government which Sarit gave; his death in 1963 was unquestionably the most significant recent political event in Thailand. At present, the problem of internal conflict does not arise. The Thanom Kittikachon regime of two years seems to be stable enough, but if the war in South Vietnam should deteriorate further, and if Communist forces in Laos should begin to drive toward the Mekong, or if Combodia should move into alliance with Peking, a real threat

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[1]Prime Minister's Office, The Collection of Prime Minister's Speech. Bangkok: Prime Minister's Office, 1963, 40-41.

[2]Donald E. Neuchterein, "Thailand After Sarit," Asian Survey, IV (1964), 843.

would be posed to Thailand's security. This, in turn, would upset Thailand's economic development.

India

Generally speaking, the problems of Indian economic development are like those of other underdeveloped countries. However, low levels of consumption, saving, productivity, and employment are different aspects of the central problem which India faces in common with other underdeveloped countries. The great problem India has always faced, is the natural and human resources of the country. In spite of the Five-Year Plans, the Indian peasant continues to be the poorest in the world. To be saved from hunger and famine, the people are being fed on imported food grains, facing at the same time the frightening spectacle of a fast-ascending price spiral.[1]

India is a vast country, with overpopulation, and this has led her down the road of backwardness and poverty. Gandhi once said that India was a country with a problem of problems. Apart from this, social customs and attitudes are supplementary problems.

Population. No regular census was taken in India until 1881. The following Table shows the trend of population growth during the last 50 years.[2]

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[1]B. Krishna, "Beginnings of India's Poverty," Eastern World, XIX (1965), 15.

[2]Dewitt and Varma, op. cit., p. 18.

TABLE XX

GROWTH OF POPULATION IN INDIA 1901-1961

Year	Population of Indian union (excluding Yammu and Kashmir) (in million)	Increase (+) or decrease (-) over previous decade (in million)	Percentage increase (+) or decrease (-)
1901	235.50	------	------
1911	249.05	+13.55	+5.8
1921	248.18	-0.87	-0.35
1931	275.52	+27.34	+11.0
1941	314.88	+39.36	+14.3
1951	356.83	+41.95	+13.3
1961	439.23	+82.38	+21.50

Source: K. K. Dewitt and G. D. Varma, Indian Economics (Delhi: Premier Publishing Company, 1964), p. 18.

The latter part of the table reveals the alarmingly rapid increase in population. In the Malthusian sense, overpopulation exists in a country when population increases more rapidly than the supply of food. This test should be reliable in a country where three-fourths of the working population are engaged in agriculture, and that, too, predominantly in food production. The application of this test leaves no doubt that India is overpopulated. The year 1921 is the "great divide" in India's population problem. Before that year, cultivation had more than kept pace with the growth of population. After it, cultivation has

lagged far behind at a time when population has forged ahead.[1] Between 1921 and 1951 the population rose about 44 percent (from 248 million to 356 million) and the area under cultivation hardly increased by 5 percent. Taking a longer period, while population went up by 38 percent, between 1900 and 1945 there was hardly any increase in the output of food grains. The serious food problem with which the country has had to contend all these years is enough to prove that the race between food and population has been badly lost by food.[2] Moreover, this increase in population is growing and will grow further, partly because the death rate will continue to fall, and partly because the size of population is growing. Even a constant percentage increase represents a growing absolute increase.

The rapid population increase has led to a rise in the percentage of cultivated to cultivable area, which has now reached the excessive figures of 75 to 95 percent in the Ganges Valley. Forests, pastures, and even marshes have been invaded by the plow. During the last 30 years population has increase about 40-42 percent, while the area under cultivation has remained practically stationary.[2]

The seriousness of Indian overpopulation is two-fold. First, the huge size is much too excessive for the present state of her economic development. India has 430 million people, about two and one-half times that of the U. S. and over 25 times that of Canada, both of which are three times larger in size.

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[1] Ibid., p. 19.

[2] P. T. Bauer, Indian Economic Policy and Development (New York: Frederick A. Praeger, 1961), 13.

[3] Dewitt and Varma, op. cit., p. 20.

Second, and this is still more alarming, further net addition to this massive existing population is taking place every year. Some 40 million were added in the ten years from 1931 to 1941, and 42 million from 1941 to 1951. Between 1951 and 1961 as many as 82 million were added. It is this large net addition that constitutes the problem, because it nullifies all efforts to improve the very low standard of living.

Speaking of this, Pandit Nehru once said: "We should be a far more advanced nation if our population were about half what it is." The Five-Year Plans of India did create new jobs, but after the completion of every five-year plan, there were more unemployed people in India than before. The Plans were "successful;" but unemployment increased.[1] Countries of Asia, most of which are still at the very low stage of social and economic development, are striving for rapid economic development. Even if the population of these countries remains stationary, this is quite an uphill task. In India, the population problem is the most critical. In order to make development more effective, the number in the population must remain static for at least ten years. To do this, apart from various methods used in population control, the government should have some force upon her people—the possible way is taxation. For example, parents with more than three children should be taxed on a graded basis.

It is possible to approach the problem from two sides: (1) production and (2) population. While population should slacken in its pace to enable

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[1]Shanti Kumar Khinduka, "A Suicidal Luxury," The Asian Student, XIII (1965), S 7.

production to overtake it, production must take rapid strides not only to overtake population but to outstrip it. With the adoption of better agricultural methods, the provision of irrigation facilities, and fundamental reorganization of agriculture through reform of the land system, the volume of agricultural production may even be doubled. The development of industries also will help to bring about a better balance between production and population.

A rise in the standard of living brought about by increased wealth production has been recognized as the primary means of checking the rate of population growth. The postponement of the age of marriage tends to lower the birth-rate in two ways. It reduced the effective childbearing period, and the most fertile period of childbearing is knocked off. Far more important is family planning; i.e., limitation of the size of families. A network of family planning clinics might be set up all over the country and existing knowledge about the use of contraceptives and other methods of birth control be assimmilated. Finally, the spread of education and general enlightenment will also make the people desire smaller families.

Production. The most urgent economic problem in India today is the problem of population versus food. Many kinds of grain are raised—rice, corn, wheat, barley, and millet. India has 350 million acres under cultivation—about the same as in the U. S. But it has 60 million farmers compared with fewer than 4 million in the U. S.[1] Grain yields are low, averaging less than one-fourth

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[1] U. S. News and World Report, June 14, 1965, p. 65.

of those in the U. S. and Japan. During a period of nearly 60 years the yield per acre in India rose by only 3 percent. India is trying to bring more land under cultivation, and hopes to add 6 million acres in the next 15 years—an increase of about 0.2 percent a year. With its population growing more than 2 percent a year—ten times as fast—the situation is explosive.[1] The solution of various problems of rapid economic development turns upon an adequate food supply to feed the growing population. Otherwise a large part of the country's foreign exchange resources will be frittered away on importing food, and the country will not be able to import machinery and industrial raw materials. Second, in the absence of sufficient of food supplies, large investments made for the development of industries and transport will result only in raising prices all around. While food production remains constant, per capita income has been slowly rising.[2] Such an inflation will stand in the way of further development.

The chief feature of the Indian economy is its heavy reliance on agriculture, combined with the relative inelasticity of food supply and large increase of population. The surplus of population is concentrated on land bringing down the mainland ratio and, in the absence of technological improvements, yield per man and acre is low.[3]

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[1] Ibid.

[2] Ibid.

[3] N. A. Khan; Problems of Growth of an Underdeveloped Economy (Bombay: Publisher House, 1961), 33.

A more sophisticated investigation into the relationship between climate and economic backwardness might concern itself with rainfall.[1] Much of the problem of both Asia and Africa revolves around their inability to secure an adequate share of the precipitation which annually falls on the earth's surface. Both India and Thailand have had to adjust to an unfavorable distribution of annual rainfall. The great monsoons provide the critical source of water for all of South Asian agriculture and when the monsoons are late the crops die in the fields. The long term movements in agricultural production in India are interwined with random fluctuations caused by the weather, systematic minor fluctuations of three to four years' length (averaging 40 to 44 months), and major cyclical fluctuations after every seven or eight years.[2]

India also faces other problems in production. As Mr. Nehru expressed to the Board of Directors of the Far East-American Council of Commerce and Industry, Inc., in New York, on December 21, 1956:[3]

> Well, first agricultural production. Then, because we have to give employment to people, we have to face the problem that with higher techniques, which we must have naturally, you can't have primitive methods of production; but the immediate effect of higher techniques in unemployment. The immediate effect of having had fewer persons to do it would be more are thrown out of employment, and then the social difficulties would rise.

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[1]Robert L. Heilbroner, The Great Ascent (New York: Harper and Row, Publisher, 1963), 32.

[2]N. A. Khan, op. cit., 55.

[3]Meyer Weinberg, Issues in Social Science (New Jersey: Prentice Hall, Inc., 1959), 198.

To sum up, it is difficult to decide whether India should have high techniques for agricultural production, thus to increase food grains for domestic consumption, or to use low techniques in order to have more people employed. For the situation like India where human beings are in oversupply. India has to go cautiously in letting them work and not throw them out by too much mechanization. The ultimate solution of the food problem lies in increasing agricultural production. This can be done by better administration and organization and by having greater coordination between agriculture, irrigation, and community development. In order to build up buffer stocks and stabilize prices and to overcome the psychology of shortage and scarcity, the government should plan for greater imports of food grains.

Problems of land. The outstanding feature of Indian rural economy is the pathetically low yield per acre for all crops. India has poor soil, exhausted by centuries of exploitation.[1] For efficient agriculture there are several problems connected with the soil. First, declining fertility. The problem of maintaining the fertility of the soil is a problem of putting manure and fertilizers in the soil. In India the consumption of inorganic fertilizer is very small relative to the size of the cultivated area. Woytinsky wrote,

> India agriculture is caught in a vicious circle. The farmers are poor because their fields are poorly cultivated. Their fields are neglected because people are too poor to buy fertilizer and to return manure to their fields, and have not enough strength and energy to pump water from

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[1]W. S. Woytinsky, India: The Awakening Giant (New York: Harper and Brothers, 1956), 34.

> their wells and dig cisterns to preserve the precious rains. They lack energy and muscular strength because they are undernourished, and they are undernourished because their fields so stingily recompense their spiritless efforts.[1]

Apart from declining in fertility the dryness of land and soil erosion are consequent problems. This means that a very important method of making the most of the land resource is to provide irrigational facilities.

Institutional obstacles. For efficient use of land it is essential that the farmer should cultivate a fair-sized holding. If on the other hand, the size of the holding is too small, then the relation between cost and yield become less favorable. John Gunther, writing of India twenty years ago, describes the situation vividly:

> There is no primogeniture in India as a rule, and when the peasant dies his land is subdivided among all his sons, with the result that most holdings are infinitesimatly small. In one district in the Punjab, following fragmentation through generations, 584 owners cultivate no less than 16,000 fields; in another 12,800 acres are split into actually 63,000 holdings. Three-quarters of the holdings in India as a whole are under ten acres. In many parts of India the average holding is less than 1 acre.[2]

This was twenty years ago, but the situation is not significantly remedied today, and it is mirrored in many other underdeveloped countries.

The small unit of cultivation also causes problems. First, a large loss of land resources takes place just because the individual fragments are, in many cases, too tiny to cultivate. Second, fragmentation causes great waste

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[1] Ibid.

[2] Heilbroner, The Great Ascent, p. 41. Quoted directly from Gunther.

of time, labor, and cattle power in going from the village site to the fields and from one fragment to the other. Although cooperative farming is practiced at the present, the pressure on the land can be reduced by migration and industrialization.[1] The result of emigration, even of those who stay behind and retain their agricultural character, will be to raise agricultural income because inferior soil will be given up. Improvements in agricultural organization and technique might then be obtained more easily. Overpopulation, while it makes for "industrialization" by draining off labor from agriculture into industry, also retards it, because it tends to make labor-intensive technologies.[2]

Social attitudes. The population of India is diverse in language, customs, and religion. Linquistic differences both illustrate the deep-seated diversity of the population and help to perpetuate it. There are about a score of different major languages in India, and at least fifteen different major scripts.[3] This creates social cleavages in addition to those created by religion and caste.[4] It complicates the already difficult problem of education. It gives linquistic foundation to regional, as opposed to national loyalties.[5]

The caste system is also an obstacle to economic development. The caste system is the most fundamental feature of Hindu society. The effective

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[1]Khan, op. cit., p. 65.

[2]Ibid., p. 256.

[3]Bauer, op. cit., p. 14.

[4]Beatrice Pitney Lamb, India: A World in Transition (New York: Frederick A. Praeger, 1963), 162.

[5]Ibid.

units in Indian society today are some 3,000 separate castes and subcastes, the members of which do not normally intermarry or eat together. In other social contacts, also, caste is an important factor in how people deal with each other. Various strong taboos, prohibitions, and ideas of pollution maintained a wide social distance between certain castes.[1] Lamb also points out that there are three points about the caste today that should be emphasized.[2]

> First, India is officially trying to create social equality, while deep-seated habits of mind work against it. Secondly, competition for improved status seems to be on the increase. Although much of this competition takes on the form of inter-caste rivalries, some possibility exists for the individual to rise above his caste, to move into new class if he can secure a good job. Third, the group—the caste—continues to play a unique role in India, persisting in a way that contrasts sharply with the situation in a more fluid society. In India, each caste has existed as such over countless generations, and castes show no sign of dissolving.

By splitting up society into compartments, caste operates as an obstacle to the social and national unity which is so essential for a national effort at economic regeneration. K. K. Dewitt and J. D. Varma point out:[3]

> It kills the spirit of enterprise and initiative by making functions hereditary. Social mobility is thus prevented. Ability has no scope to show itself, since under the system, movement up the social ladder is out of question. The curse of untouchability, the most notorious aspect of the system, spells the degradation of millions of human beings to a condition often worse than that of slaves. Mobility of labour is rendered difficult, if not impossible. Thus the development of large scale industry, which presupposes an easy mobility of labor, becomes difficult of

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[1] Ibid., p. 135.

[2] Lamb, op. cit., p. 151-152.

[3] Dewitt and Varma, op. cit., p. 29.

> achievement. The caste system has produced among the higher castes a sort of contempt for manual labour. This has resulted in serious economic loss to the country.

Finally, the problem of administration, India is a vast and old country and has an old custom and institution. It is quite hard to put new ideas into people, or, in other words, to turn an old India into a type of democracy would take time. In certain respects, India under the leadership of Gandhi, Nehru, and the present Prime Minister, Shastri, have been doing a job of democracy in the world where new nations are abandoning it—in the freedom and independence of the judiciary, in the free elections and the free and responsible functioning of parliament, in freedom of speech and the press. It is quite difficult to achieve this and economic planning also. As Mr. Nehru had commented at the Conference with the Board of Directors of Far East-America Council of Commerce and Industry in New York, 1956, "Planning, what is it after all? There is no compulsion. If they don't do it, then they don't do it, and the matter ends. So any idea of associating compulsion would not be correct."

D. R. Gadgil writes:

> The absence of large powers of enforcement (coercion) and of whole-hearted support of particular sections of the population has to be compensated for by . . . greater understandings and willing support on the part of generality of the people. The largest difficulties of Indian Planning today seem to arise from these needs of the situation. It is the doubtful quality of the leadership in planned effort and its failure to evoke adequate public response that appear to be at the centre of the existing problem.
> . . . As a reaction of this a strong suspicion is created among the mass of the people about neglect or worse of their interests. A plan of development in a poor country like India involves above all some hardships and considerable self-restraint, at least in the initial stages. The willing, acceptance

> of hardships, and self-restraint can come about only if there is a feeling of common purpose, common interest and common sharing. Such a feeling appears totally absence in the country today.[1]

It is quite hard to find the solution to these problems, but one might ask himself a few questions. Are the Indians ready for democracy? Is it better for India to adopt some kind of strong federal government, together with so-called "benevolent dictatorship" which could develop economic development programs more effectively?

Conclusion

The problem in any underdeveloped country is, first of all, how to provide the necessitites of life for all. These countries have to find their own ways to achieve their goal. Countries have to develop their own economic approach in regard to their own problems. To compare the economic development efforts of other countries with one's own give examples and experience. In comparing Thailand and India, Thailand is a small country in comparison to India, but both can learn from each other. India is an old country and has an experience with three plans while Thailand has only undergone the First Plan. At present, Thailand still does not face the critical problems India has already faced. It is important for the Thai to study Indian economic efforts the way she solved her problems—and to learn her mistakes.

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[1]D. R. Gadgil, Planning and Economic Policy in India (Bombay: Asia Publishing House, 1961), 13-14.

From an economic point of view, both countries are far from reaching an advanced stage of development. Both are now trying to develop their economy on a democratic basis, and always willing to cooperate with the West although India originally adopted a neutral policy. What they have to do, they must do rapidly—otherwise, they will be overwhelmed—overwhelmed by social forces and by the growth of population. Time is getting short. There is no time for experimentation. Mistakes in the past must be corrected. Greater production of commodities is the immediate aim so that people may have them. Generally, agriculture and all industries should flourish. Employment should grow; there should not be any type of employment which, apart from its being a bad thing in itself, again creates dangers for them.

What the future holds depends upon the ability of these countries to respond and to solve their problems. As a Thai, who is also interested in India, the writer hopes that in the near future both countries will achieve economic growth and their respective peoples can live in peace and prosperity in the modern world.

BIBLIOGRAPHY

Documents

Bank of Thailand, Reports on Thai Economics. Bangkok, Thailand, 1963.

Government of Thailand, The National Economic Development Plan 1961-1966 (Second Phase: 1964-1966. Bangkok, Thailand, 1964.

Office of the National Economic Development Board, National Income. Bangkok, Thailand, 1963.

Office of the National Economic Development Board, Thailand: National Expenditure. Bangkok, Thailand, 1961.

Office of the National Economic Development Board, Capital Formation in Thailand during 1957-1962. Bangkok, Thailand, 1962.

Office of the National Economic Development Board, Reports on Thai Economics in 1962. Bangkok, Thailand, 1962.

Planning Commission, Third Five Year Plan. Government of India, 1961.

Planning Commission, The Prime Minister's Speech Introducing the 2505 (1962) Budget to the Constituent Assembly. Bangkok, Thailand. Prime Minister's Office, 1961.

Planning Commission, The Industrial Finance Corporation of Thailand: A Guide to its Proper Use. Bangkok, Thailand, Industrial Finance Corporation of Thailand, 1960.

Books

Bauer, P. T. Indian Economic Policy and Development. New York: Frederick A. Praeger, 1961.

Berkowitz, Monroe. India, Struggle Against Time, Chicago: Scott and Freeman Company, 1963.

Buchanan, Norman S., and Howard S. Ellis. Approaches to Economic Development. New York: Twentieth Century Fund, 1955.

Coughlin, Richard J. Double Identities: The Chinese in Modern Thailand. Hong Kong: Hong Kong University Press, 1960.

Dewitt, Dewal K., and J. D. Varma. Indian Economics. Delhi: Premier Publishing Company, 1964.

Gadgil, D. R. Planning and Economic Policy in India. Bombay: Asia Publishing House, 1961.

Harbison, Frederick and Charles A. Myers. Education, Manpower and Economic Growth. New York: McGraw-Hill Book Company, 1964.

Heibroner, Robert L. The Great Ascent. New York: Harper and Row, Publishers, 1963.

Higgins, Benjamin. Economic Development: Principles, Problems and Policies. New York: W. W. Norton, Inc., 1959.

Hoontrakul, Likhit. The Historical Records of the Siamese-Chinese Relations. Bangkok: Thai Bithaya Press, 1953.

Insor, D. Thailand: A Political, Social and Economic Analysis. New York: Frederick A. Praeger, 1963.

International Bank for Reconstruction and Development. A Public Development Program for Thailand. Baltimore: The John Hopkins Press, 1959.

Kamat, G. R. India 1963. London: Information Service of India, 1963.

Khan, N. A. Problems of Growth of an Underdeveloped Economy. Bombay: Publisher House, 1961.

Kindleberger, Charles P. Economic Development. New York: McGraw-Hill Book Company, 1965.

Krause, Walter. Economic Development. Belmont, California: Wadworth Publishing Company, 1962.

Lamb, Beatrice and Pitney Lamb. India: A World in Transition. New York: Frederick A. Praeger, 1963.

Planning Commission. Towards a Self-Reliance Economy. Government of India, 1962.

Soonthornsima, Chinawoot. A Macroeconomic Model for Economic Development of Thailand. Bangkok: Thamasart University Press, 1964.

Stifel Laurence D., and Arthur A. Wichmann. Reports on Burmese Economics. Rangoon: U. S. Agency for International Development, 1964.

United Nations, Economic Survey of Asia and Far East 1963. Bangkok: United Nations Publication, 1963.

United Nations, India: Some Facts. Washington, D. C.: Information Service of India, 1964.

United Nations, Thai-American Economic and Technical Cooperation. Bangkok: United States Operations Mission, Thailand, 1961.

United Nations, Breakthrough, Boston: Kaiser Industries Corporation, 1961.

Ward, Barbara. India and the West. New York: W. W. Norton, Inc., 1962.

Woytinsky, W. S. India: The Awakening Giant. New York: Harper and Brothers, 1956.

Periodicals

Ayal, Eleizer B. "Thailand's Economic Development," Pacific Affairs, XXXIV (May 1964) 157-165.

Deo, Narsingh. "Nowhere as Acute as Asia," The Asian Student, XIII (June 5, 1965), S 6.

Fernanda, Silva. "Family Planning in Asia," Eastern World, XVIII (April 1963), 13.

Krishna, B. "Beginnings of India's Poverty," Eastern World, XIX (April 1965), 15.

Krisniah, S. "Spotlight on Economics," Bangkok World Annual Review, Bangkok: Bangkok World Publishing, 1964. 23.

Moorthy, K. Krishna. "Rearmament Plant," Far Eastern Economic Review, XLIV (June 1964), 370.

National Statistic Office, Bulletin of Statistics, XIII (June 1965), 21-25.

National Statistic Office, "Indian Economy: A Brief Resume," Indian News, Washington, D. C.: The Information Service of India, (January 19, 1963).

National Statistic Office, Far Eastern Economic Annual Number 1965, (December 1964).

National Statistic Office, "National Income Estimates," Indian and Foreign Review, XI (July 1, 1965), 8.

National Statistic Office, "Reports and Inquiries, the Population and Labor Force of Asia 1950-1980," International Labor Review, LXXXVI (October 1964), 20.

National Statistic Office, "India Without Nehru," Time, LXXXVI (August 13, 1965), 26-26A.

Nuechterein, Donald E. "Thailand After Sarit," Asian Survey, IV (May 1964), 843.

Pillai, Gopinath. "On the Upswing," Far Eastern Economic Review, XLVIII (April 1965), 7-8.

Pombhejara, Vichitvong. "Thailand's Six-Year Plan," Asian Survey, CLXIII (March 1965), 163-165.

Sithi-Ammuai, Paul. "A Problem of Planning," Far Eastern Economic Review XLIV (May 17, 1964), 302-303.

Smythe, Hugh H. "Report From Thailand," Eastern World, XVII (1963), 15.

Spencer, Daniel. "India's Planning and Foreign Aid," Pacific Affairs, XXXIV (1961), 28.

Weinberg, Meyer. "A Comparison of India and China," Issues in Social Science. New Jersey: Prentice-Hall Inc., 1959. 190-196.

Wellow, John W. and Uma J. Lele. "Alternative Estimates of the Trend in Indian Food Grains Production," Economic and Cultural Change, XIII (1965), 39.

Encyclopedia

Crone, Robert I. Encyclopedia International (New York: Grolier Inc., 1963), IX, 152-193.

Mojumda, R. C. Encyclopedia Americana (New York: Americana Corporation, 1964), XIV, 270-272.